



保存版

# Eliminator 600

**Motorcycle Owner's Manual**



Whenever you see the symbols shown below, heed their instructions! Always follow safe operating and maintenance practices.

**⚠ WARNING**

This warning symbol identifies special instructions or procedures which, if not correctly followed, could result in personal injury, or loss of life.

**CAUTION**

This caution symbol identifies special instructions or procedures which, if not strictly observed, could result in damage to or destruction of equipment.

**NOTE**

○ *This note symbol indicates points of particular interest for more efficient and convenient operation.*

**NOTICE**

THIS PRODUCT HAS BEEN MANUFACTURED FOR USE IN A REASONABLE AND PRUDENT MANNER BY A QUALIFIED OPERATOR AND AS A VEHICLE ONLY.



## **FOREWORD**

We wish to thank you for choosing this fine Kawasaki Motorcycle. Your new motorcycle is the product of Kawasaki's advanced engineering, exhaustive testing, and continuous striving for superior reliability, safety, and performance.

Read this Owner's Manual before riding so you will be thoroughly familiar with the proper operation of your motorcycle's controls, its features, capabilities and limitations. This manual offers many safe riding tips, but its purpose is not to provide instruction in all the techniques and skills required to ride a motorcycle safely. Kawasaki strongly recommends that all operators of this vehicle enroll in a motorcycle rider training program to attain awareness of the mental and physical requirements necessary for safe motorcycle operation.

To ensure a long, trouble-free life for your motorcycle, give it the proper care and maintenance described in this manual. For those who would like more detailed information on their Kawasaki Motorcycle, a Service Manual is available for purchase from any Kawasaki dealer. The Service Manual contains detailed disassembly and maintenance information.

Due to improvements in design and performance during production, in some cases there may be minor discrepancies between the actual vehicle and the illustrations and text in this manual.

**KAWASAKI HEAVY INDUSTRIES, LTD.**  
**Consumer Products Group**

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**SPECIFICATIONS**

## SPECIFICATIONS

### DIMENSIONS

Overall Length	2,230 mm (87.80 in.)
Overall Width	720 mm (28.35 in.)
Overall Height	1,090 mm (42.91 in.)
Wheelbase	1,550 mm (61.02 in.)
Road Clearance	145 mm (5.71 in.)
Dry Weight	197 kg (434 lb) (Cal) 198 kg (437 lb)

## ENGINE

Type	DOHC, 16-valve, 4-cylinder, 4-stroke, liquid-cooled
Displacement	592 mL (36.1 cu in.)
Bore x Stroke	60.0 x 52.4 mm (2.36 x 2.06 in.)
Compression Ratio	11.0 : 1
Starting System	Electric starter
Cylinder Numbering Method	Left to right, 1-2-3-4
Firing Order	1-2-4-3
Carburetors	Keihin CVK30 x 4
Ignition System	Battery and coil (transistorized ignition)
Ignition Timing	12.5° BTDC @1,050 r/min (rpm) ~
(Electronically advanced)	40° BTDC @10,000 r/min (rpm)
	(Cal) 7.5° BTDC @1,250 r/min (rpm) -
	35° BTDC @10,000 r/min (rpm)
Spark Plugs	NGK DR9EA or ND 27ESR-U



Lubrication System  
Engine Oil

Engine Oil Capacity  
Coolant Capacity

## **TRANSMISSION**

Transmission Type  
Clutch Type  
Driving System  
Primary Reduction Ratio  
Final Reduction Ratio  
Overall Drive Ratio  
Gear Ratio: 1st  
              2nd  
              3rd  
              4th  
              5th  
              6th

Final Gear Case Oil

Final Gear Case Oil  
Capacity

Forced Lubrication (wet sump)  
SE, SF or SG class SAE 10W40, 10W50,  
20W40, or 20W50

3.0 L (3.2 US qt)  
2.0 L (2.1 US qt)

6-speed, constant mesh, return shift  
Wet, multi disc  
Shaft drive  
2.641 (27/23 x 63/28)  
2.690 (16/22 x 37/10)  
6.054 (Top gear)  
2.571 (36/14)  
1.777 (32/18)  
1.380 (29/21)  
1.125 (27/24)  
0.961 (25/26)  
0.851 (23/27)

API GL-5 SAE90[above 5°C (41°F)]  
SAE80[below 5°C (41°F)]

190 mL (0.20 US qt)

## **FRAME**

Castor	29°
Trail	105 mm (4.13 in.)
Tire Size:	
Front	100/90-18 56H Tube-type
Rear	150/80-15 M/C 70H or 150/80B 15 M/C 70V Tube-type
Fuel Tank Capacity	13 L (3.44 US gal)

## **ELECTRICAL EQUIPMENT**

Battery	12 V 10 Ah
Headlight	12 V 60/55 W
Tail/Brake Light	12 V 8/27 W

Specifications subject to change without notice.

## Vehicle Minimum Stopping Distance on Dry Pavement

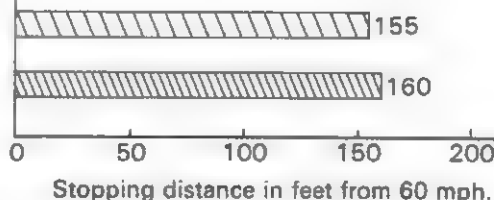
These figures indicate braking performance that can be met or exceeded by the vehicle to which they apply, without locking the wheels, under different conditions of loading. The information presented represents results obtainable by skilled drivers under controlled road and vehicle conditions, and the information may not be correct under other conditions.

Description of vehicle to which this table applies: Model ZL600-B3

### A. Fully Operational Service Brake

Load: Light

Maximum

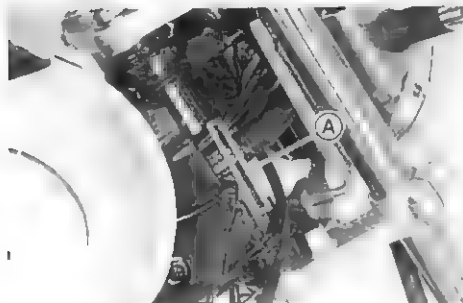


Manufacturer: **Kawasaki Heavy Industries, Ltd.**

## »»»»»»»»»»»»»»»» SERIAL NUMBER LOCATIONS ««««««««««««««««

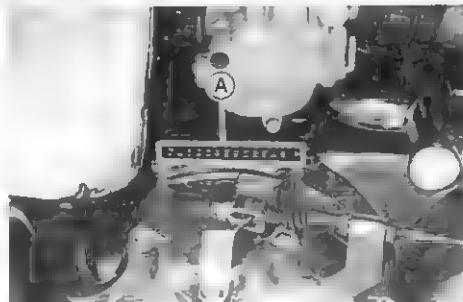
The engine and frame serial numbers are used to register the motorcycle. They are the only means of identifying your particular machine from others of the same model type. These serial numbers may be needed by your dealer when ordering parts. In the event of theft, the investigating authorities will require both numbers as well as the model type and any peculiar features of your machine that can help them identify it.

**Frame No.**



**A. Frame Number**

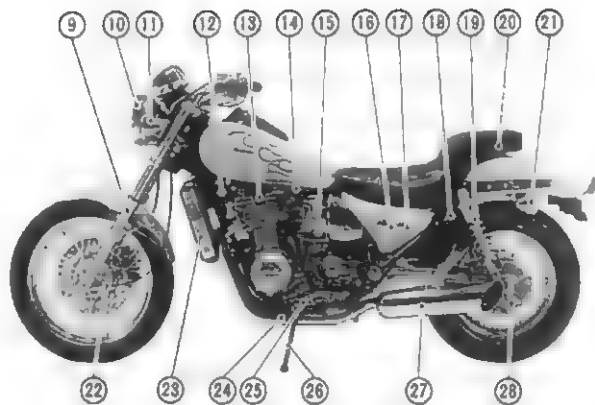
**Engine No.**



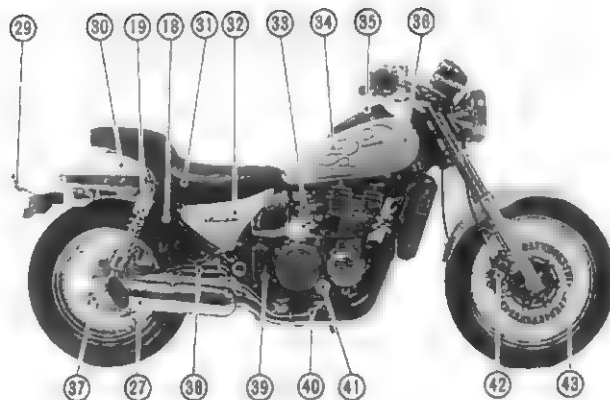
**A. Engine Number**



- 9. Front Fork
- 10. Headlight
- 11. Turn Signal/Running Position Light
- 12. Horn
- 13. Spark Plugs
- 14. Fuel Tap
- 15. Idle Adjusting Screw
- 16. Air Cleaner Element
- 17. Junction Box (Fuses)
- 18. Helmet Hook
- 19. Rear Shock Absorber
- 20. Tool Kit Container/Tool Kit
- 21. Turn Signal Light
- 22. Speedometer Cable
- 23. Radiator
- 24. Side Stand Switch
- 25. Shift Pedal
- 26. Side Stand
- 27. Muffler
- 28. Final Gear Case

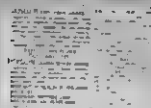
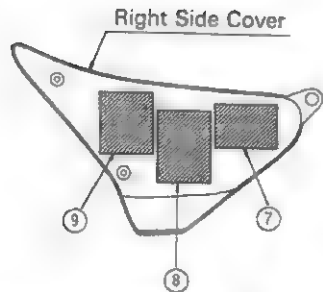


- 29. Tail/Brake Light
- 30. Seat Lock
- 31. Seat
- 32. Battery
- 33. Carburetor
- 34. Fuel Tank
- 35. Fuel Tank Cap
- 36. Radiator Cap
- 37. Brake Lining
- Wear Indicator
- 38. Rear Brake Light Switch
- 39. Coolant Reserve Tank
- 40. Rear Brake Pedal
- 41. Oil Level Gauge
- 42. Brake Caliper
- 43. Brake Disc









- \*7. Vehicle Emission Control Information
- \*\*8. Vacuum Hose Routing Diagram
- 9. Battery Vent Hose Routing
- \*10. Noise Emission Control Information
- 11. Final Gear Case Oil
- 12. Battery Poison/Danger

\* : only on US model

\*\* : only on California model



1. Any passenger should be thoroughly familiar with motorcycle operation. The passenger can affect control of the motorcycle by improper positioning during cornering and sudden movements. It is important that the passenger sit still while the motorcycle is in motion and not interfere with the operation of the motorcycle. Do not carry animals on your motorcycle.
2. You should instruct any passenger before riding to keep his feet on the passenger footpegs and hold on to the operator, seat strap or grab rail. Do not carry a passenger unless he or she is tall enough to reach the footpegs and footpegs are provided.
3. All baggage should be carried as low as possible to reduce the effect on the motorcycle center of gravity. Baggage weight should also be distributed equally on both sides of the motorcycle. Avoid carrying baggage that extends beyond the rear of the motorcycle.
4. Baggage should be securely attached. Make sure that the baggage will not move around while you are riding. Recheck baggage security as often as possible (not while the motorcycle is in motion) and adjust as necessary.
5. Do not carry heavy or bulky items on a luggage rack. They are designed for light items, and overloading can affect handling due to changes in weight distribution and aerodynamic forces.
6. Do not install accessories or carry baggage that impairs the performance of the motorcycle. Make sure that you have not adversely affected any lighting components, road clearance, banking capability (i.e., lean angle), control operation, wheel travel, front fork movement, or any

other aspect of the motorcycle's operation.

7. Weight attached to the handlebar or front fork will increase the mass of the steering assembly and can result in an unsafe riding condition.
8. Fairings, windshields, backrests, and other large items have the capability of adversely affecting stability and handling of the motorcycle, not only because of their weight, but also due to the aerodynamic forces acting on these surfaces while the motorcycle is in operation. Poorly designed or installed items can result in an unsafe riding condition.

9. This motorcycle was not intended to be equipped with a sidecar or to be used to tow any trailer or other vehicle. Kawasaki does not manufacture sidecars or trailers for motorcycles and cannot predict the effects of such accessories on handling or stability, but can only warn that the effects can be adverse and that Kawasaki cannot assume responsibility for the results of such unintended use of the motorcycle. Furthermore, any adverse effects on motorcycle components caused by the use of such accessories will not be remedied under warranty.



## Speedometer and Tachometer

The speedometer shows the speed of the vehicle. In the speedometer face are the odometer and trip meter. The odometer shows the total distance that the vehicle has been ridden. The trip meter shows the distance traveled since it was last reset to zero. The trip meter can be reset to zero by turning the reset knob counterclockwise.


The tachometer shows the engine speed in the revolutions per minute (r/min, rpm). On the right side of the tachometer face is a portion called the "red zone." Engine r/min (rpm) in the red zone is above maximum recommended engine speed and is also above the range for good performance.

### CAUTION

**Engine r/min (rpm) should not be allowed to enter the red zone; operation in the red zone will overstress the engine and may cause serious engine damage.**

## Indicator Lights

↔ When the turn signal switch is turned to left or right, the corresponding turn signal indicator light flashes on and off.

 The oil pressure warning light goes on whenever the oil pressure is dangerously low or the ignition switch is in the ON position with the engine not running, and goes off when the engine oil pressure is high enough. Refer to the Maintenance and Adjustment chapter for more detailed engine oil information.

**HD** When the headlight is on high beam, the high beam indicator light is lit.

**N:** When the transmission is in neutral, the neutral indicator light is lit.

**TEMP:** The coolant temperature warning light (LED-Light Emitting Diode) goes on when the ignition switch is turned on and goes off soon after the engine starts running to ensure that its circuit functions properly. The warning light also goes on whenever the coolant temperature rises to 120°C or higher when the motorcycle is in operation. If it stays on, stop the engine and check the coolant level in the reserve tank after the engine cools down.

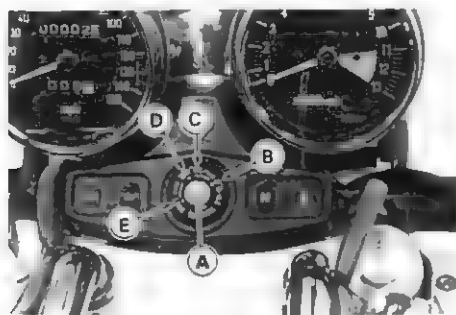
## Key

This motorcycle has a combination key, which is used for the ignition switch/steering lock, seat lock, helmet hook, and fuel tank cap.

Blank keys are available at your Kawasaki dealers. Ask your Dealer to make any additional spare keys you may need, using your original key as a master.

## Ignition Switch/Steering Lock

This is a four-position, key-operated switch. The key can be removed from the switch when it is in the OFF, LOCK, or P(Park) position.



- A. Ignition Switch/Steering Lock
- B. P (Park) position
- C. ON position
- D. OFF position
- E. LOCK position

<b>P(Park)</b>	Steering locked. Engine off. Taillight on. All other electrical circuits cut off.
<b>ON</b>	Engine on. All electrical equipment can be used.
<b>OFF</b>	Engine off. All electrical circuits off.
<b>LOCK</b>	Steering locked. Engine off. All electrical circuits off.

## NOTE

- *The tail and running position lights are on whenever the ignition switch is in the ON position. The headlight goes on when the starter button is released after starting the engine. To avoid battery discharge, always start the engine immediately after turning the ignition switch to ON.*
- *If you leave the P(Park) position on for a long time (one hour), the battery may become totally discharged.*



### To operate the Ignition switch:

OFF  ON  P(Park)



1. Turn the handlebar fully to the left.

2. a. For parking push down the key in the ON position and turn it to P (Park).

**LOCK** b. For locking push down the key in the OFF position and turn it to LOCK.

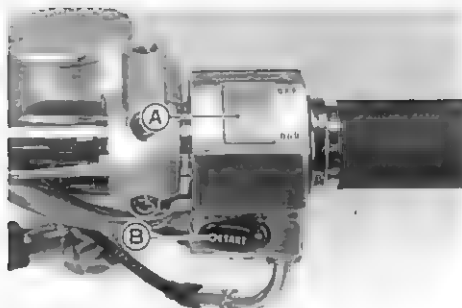
### Right Handlebar Switches Engine Stop Switch

In addition to the ignition switch, the engine stop switch must be in the RUN position for the motorcycle to operate.

The engine stop switch is for emergency use. If some emergency requires stopping the engine, move the engine stop switch to the OFF position.

### NOTE

○ *Although the engine stop switch stops the engine, it does not turn off all the electrical circuits. Ordinarily, the ignition switch should be used to stop the engine.*



**A. Engine Stop Switch**  
**B. Starter Button**

### **Starter Button**

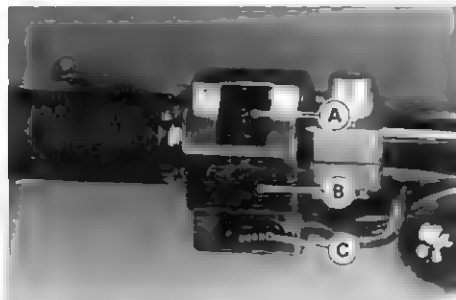
The starter button operates the electric starter when pushed with the clutch lever pulled in or the transmission in neutral.

Refer to the Starting the Engine section of the "How to Ride the Motorcycle" chapter for starting instructions.

## **Left Handlebar Switches**

### **Dimmer Switch**

High or low beam can be selected with the dimmer switch. When the headlight is on high beam (HI), the high beam indicator light is lit.



**A. Dimmer Switch**  
**B. Turn Signal Switch**  
**C. Horn Button**

### **Turn Signal Switch**

When the turn signal switch is turned to L (left) or R (right), the corresponding turn signals flash on and off.

### **Horn Button**

When the horn button is pushed, the horn sounds.

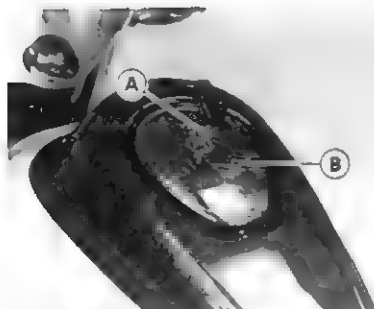
### **Fuel Tank Cap**

To open the fuel tank cap, insert the ignition switch key into the lock and turn the key to the right.

To close the cap, push it down into place with the key inserted. The key can be removed by turning it counterclockwise to the original position.

### **NOTE**

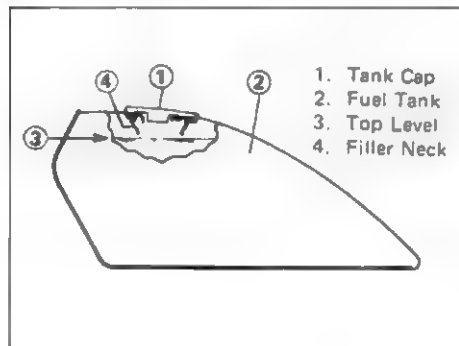
- *The tank cap cannot be closed without the key inserted, and the key cannot be removed unless the cap is locked properly.*
- *Do not push the cap down with the key, or the cap cannot be locked.*



A. Ignition Switch Key  
B. Fuel Tank Cap

## Fuel Tank

The following octane rating gasoline is recommended in the fuel tank. Avoid filling the tank in the rain or where heavy dust is blowing so that the fuel does not get contaminated.



### **⚠ WARNING**

Gasoline is extremely flammable and can be explosive under certain conditions. Turn the ignition switch OFF. Do not smoke. Make sure the area is well ventilated and free from any source of flame or sparks; this includes any appliance with a pilot light. Never fill the tank so the fuel level rises into the filler neck. If the tank is overfilled, heat may cause the fuel to expand and overflow through the vents in the tank cap. After refueling, make sure the tank cap is closed securely. If gasoline is spilled on the fuel tank, wipe it off immediately.

### **CAUTION**

California models only: Never fill the tank so the fuel level rises into the filler neck. If the tank is overfilled, heat may cause the fuel to expand and flow into the Evaporative Emission Control System resulting in hard starting and engine hesitation.

### **Fuel Requirement:**

#### *Octane Rating*

The octane rating of a gasoline is a measure of its resistance to detonation or "knocking." Use a gasoline with an octane rating equal to or higher than that shown in the table below.

Octane Rating Method	Minimum Rating
Antiknock Index $\frac{\text{(RON + MON)}}{2}$	87
Research Octane Number (RON)	91

The Antiknock Index is an average of the Research Octane Number (RON) and the Motor Octane Number (MON). The Antiknock Index is posted on service station pumps in the U.S.A. Research Octane Number is a commonly used term describing a gasoline's octane rating.

### *Gasolines Containing Oxygenates (Alcohols and ethers)*

*Gasoline frequently contains oxygenates (alcohols and ethers) especially in areas of the U.S. and Canada which are required to sell such reformulated fuels as part of a strategy to reduce exhaust emissions. The types and volume of fuel oxygenates approved for use in unleaded gasoline include a broad range of alcohols and ethers. Gasoline quality is important. Fuels of low quality or not meeting industry specifications may result in unsatisfactory performance. Heed the following cautions:*

## CAUTION

Operating problems that result from the use of poor quality or non-recommended fuel may not be covered under your warranty.

Never use gasohol with an octane rating lower than the minimum octane rating specified by Kawasaki for this product.

Never use gasohol containing more than 10% ethanol (grain alcohol).

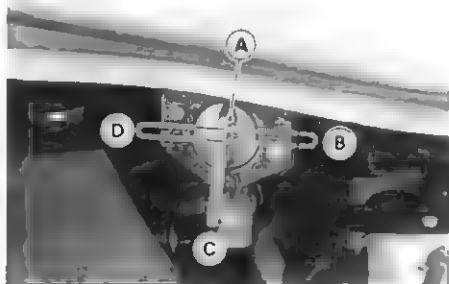
Never use gasohol containing more than 5% methanol (wood alcohol). Gasoline containing methanol must also be blended with cosolvents and corrosion inhibitors.

Never store this product with gasohol in the fuel system.

Gasoline containing alcohol can cause paint damage. Be extra careful not to spill gasohol during refueling.

## Fuel Tap

The fuel tap is an automatic type which shuts off the fuel supply when the engine is stopped in the ON or RES position.



A. Fuel Tap

B. PRI position

C. ON position

D. RES position

The fuel tap has three positions: ON, RES (reserve), and PRI (prime). If the fuel runs out with the tap in the ON position, turn the tap to PRI, leave it for a few seconds, and then turn it to RES.

The last 2.5 L (0.66 US gal) of fuel can be used by turning the fuel tap to RES.

The PRI position bypasses the automatic control and is useful for priming the engine after running out of gas, or for completely draining the tank.

### NOTE

- *Since riding distance is limited when on RES, refuel at the earliest opportunity.*
- *Make certain that the fuel tap is turned to ON (Not RES) after filling up the fuel tank.*
- *To start a cold engine after the motorcycle has been stored for a long time, first turn the tap to PRI, leave it for a moment, and return it to ON.*

### ⚠ WARNING

Practice operating the fuel tap with the motorcycle stopped. To prevent an accident you should be able to operate the fuel tap while riding without taking your eyes off the road.

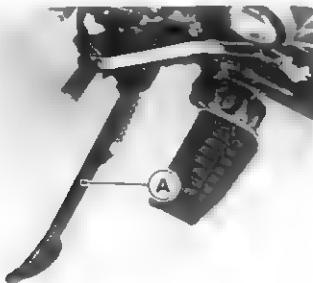
Be careful not to touch the hot engine while operating the fuel tap.

Do not leave the fuel tap in the PRI (prime) position while riding or parking the motorcycle. The engine may become flooded or fuel may spill onto the ground and create a fire hazard, if the vehicle falls over.



## Stand

The motorcycle is equipped with a side stand.



A. Side Stand

## NOTE

○ *When using the side stand, turn the handlebar to the left.*

Whenever the side stand is used, make it a practice to kick the stand fully up before sitting on the motorcycle.

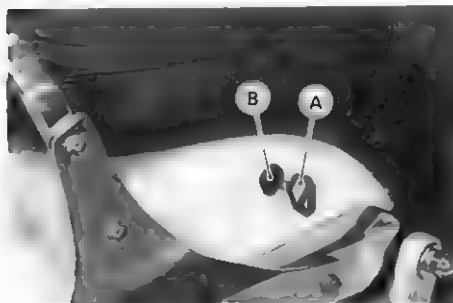
## NOTE

○ *The motorcycle is equipped with a side stand switch. This switch is designed so that the engine stops if the clutch is engaged with the transmission in gear when the side stand has been left down.*

## Seat Lock

To remove the seat, insert the ignition switch key into the seat lock, turn the key to the right, and pull up on the rear of the seat.

The seat is locked when pushed back into place.

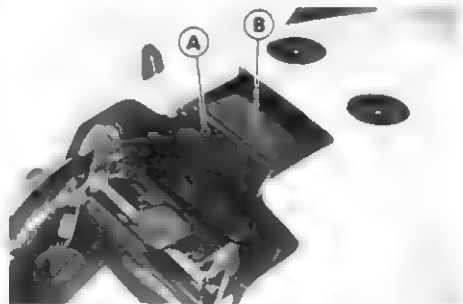


A. Ignition Switch Key  
B. Seat Lock

## Tool Kit Container/Tool Kit

The tool kit container is located under the seat.

The minor adjustments and replacement of parts explained in this manual can be performed with the tools in the kit.



A. Tool Kit Container  
B. Tool Kit

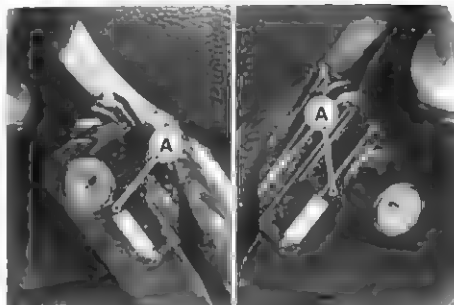
## Helmet Hooks

Helmets can be secured to the motorcycle using the helmet hooks.

The helmet hook can be unlocked by inserting the ignition switch key into the lock, and turning the key to the right.

### **⚠ WARNING**

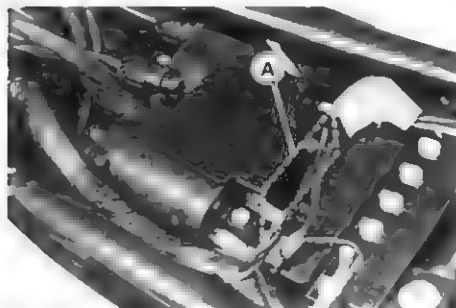
**Do not ride the motorcycle with a helmet attached to the hooks. The helmet could cause an accident by distracting the operator or interfering with normal vehicle operation.**



**A. Helmet Hook**

## **Air Cleaner Intake**

The air cleaner intake allows air to enter the engine. Never allow anything to restrict the flow of air into the air cleaner. A restricted air cleaner will reduce performance and increase exhaust emissions.



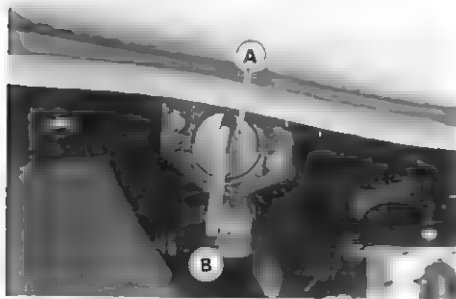
**A. Air Cleaner Intake**



## »»»»»»»»»»»»»»»» HOW TO RIDE THE MOTORCYCLE ««««««««««««««««

### Starting the Engine

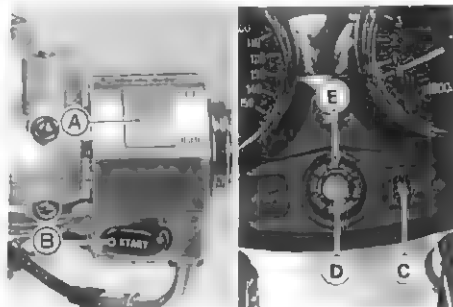
- Turn the fuel tap to the ON position.



A. Fuel Tap

B. ON position

- Check that the engine stop switch is in the RUN position.
- Turn the ignition switch on.
- Make certain the transmission is in neutral.



A. Engine Stop Switch

B. Starter Button

C. Neutral Indicator Light

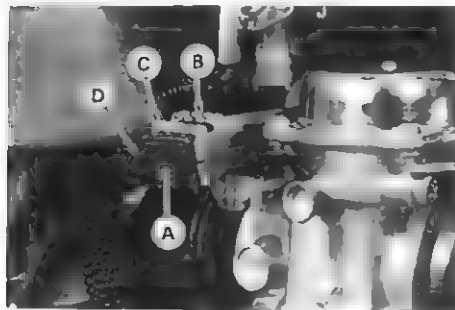
D. Ignition Switch/Steering Lock

E. ON position

- If the engine is cold, pull the choke knob all the way out.

## NOTE

- *When the engine is already warm or on hot days [35° (95°F) or more], open the throttle part way instead of using the choke, and then start the engine.*



A. Choke Knob  
B. OFF position

C. HALF position  
D. ON position

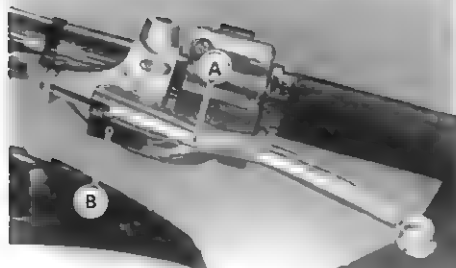
- Leaving the throttle completely closed, push the starter button until the engine starts.

## CAUTION

Do not operate the starter continuously for more than 5 seconds or the starter will overheat and the battery power will drop temporarily. Wait 15 seconds between each operation of the starter to let it cool and the battery power recover.

## NOTE

- *If the engine is flooded, crank the engine over with the throttle fully open until the engine starts.*
- *The motorcycle is equipped with a starter lockout switch. This switch prevents the electric starter from operating when the clutch is engaged and the transmission is not in neutral.*



**A. Clutch Lever**  
**B. Starter Lockout Switch**

- Return the choke to the halfway position after the length of time shown in the table.

Ambient temperature

10° ~ 30°C (50 ~ 86°F)	Immediately
Below 10°C (50°F)	About 30 seconds.

- Continue warming up with the choke in this position.
- When the engine is warmed up enough to idle without using the choke, return the choke to the off position.

### NOTE

- If you drive the motorcycle before the engine is warmed up, return the choke to the off position after you have driven the motorcycle for 15 seconds.

### CAUTION

**Do not let the engine idle longer than five minutes, or engine overheating and damage may occur.**



## Jump Starting

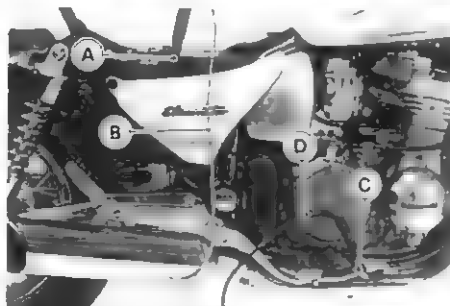
If your motorcycle battery is "run down," it should be removed and charged. If this is not practical, a 12 volt booster battery and jumper cables may be used to start the engine.

### **⚠ WARNING**

Battery acid generates hydrogen gas which is flammable and explosive under certain conditions. It is present within a battery at all times, even in a discharged condition. Keep all flames and sparks (cigarettes) away from the battery. Wear eye protection when working with a battery. In the event of battery acid contact with skin, eyes, or clothing, wash the affected areas immediately with water for at least five minutes. Seek medical attention.

### *Connecting Jumper Cables*

- Remove the seat.
- Make sure the ignition switch is turned "OFF."
- Connect a jumper cable from the positive (+) terminal of the booster battery to the positive (+) battery terminal.



- A. Positive (+) Battery Terminal
- B. To Booster Battery Positive (+) Terminal
- C. Rear Brake Pedal
- D. To Booster Negative (-) Terminal

- Connect another jumper cable from the negative (-) terminal of the booster battery to your motorcycle rear brake pedal or other unpainted metal surface. Do not use the negative (-) terminal of the battery.

#### **⚠ WARNING**

**Do not make this last connection at the carburetor or battery. Take care that you do not touch the positive and negative cables together, and do not lean over the battery when making this last connection. Do not jump start a frozen battery. It could explode.**

**Do not reverse polarity by connecting positive (+) to negative (-) or a battery explosion and serious damage to the electrical system may occur.**

- Follow the standard engine starting procedure.

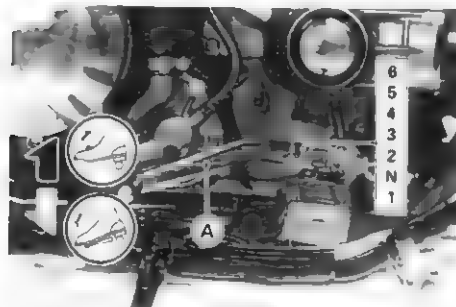
#### **CAUTION**

**Do not operate the starter continuously for more than 5 seconds or the starter will overheat and the battery power will drop temporarily. Wait 15 seconds between each operation of the starter to let it cool and the battery power recover.**

- After the engine starts, disconnect the jumper cables. Disconnect the negative (-) cable from the motorcycle first.

## Moving Off

- Check that the side stand is up.
- Pull in the clutch lever.
- Shift into 1st gear.
- Open the throttle a little, and start to let out the clutch lever very slowly.
- As the clutch starts to engage, open the throttle a little more, giving the engine just enough fuel to keep it from stalling.



A. Shift Pedal

## NOTE

- *The motorcycle is equipped with a side stand switch. This switch is designed so that the engine stops if the clutch is engaged with the transmission in gear when the side stand has been left down.*

## Shifting Gears

- Close the throttle while pulling in the clutch lever.
- Shift into the next higher or lower gear.

### ⚠ WARNING

When shifting down to a lower gear, do not shift at such a high speed that the engine r/min (rpm) jumps excessively. Not only can this cause engine damage, but the rear wheel may skid and cause an accident. Downshifting should be done below 5,000 r/min (rpm) for each gear.

- Open the throttle part way, while releasing the clutch lever.

### NOTE

- *The transmission is equipped with a positive neutral finder. When the motorcycle is standing still, the transmission cannot be shifted past neutral from 1st gear. To use the positive neutral finder, shift down to 1st gear, then lift up on the shift pedal while standing still. The transmission will shift only into neutral.*

### Vehicle speed when shifting

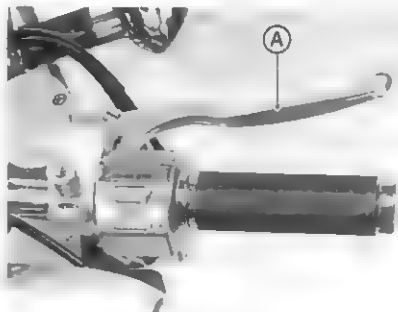
Shifting up	km/h (mph)	Shifting down	km/h (mph)
1st → 2nd	15 (9)	6th → 5th	30 (19)
2nd → 3rd	25 (15)	5th → 4th	25 (15)
3rd → 4th	35 (21)	4th → 3rd	20 (12)
4th → 5th	45 (27)	3rd → 2nd	15 (9)
5th → 6th	55 (34)	2nd → 1st	15 (9)

## Braking

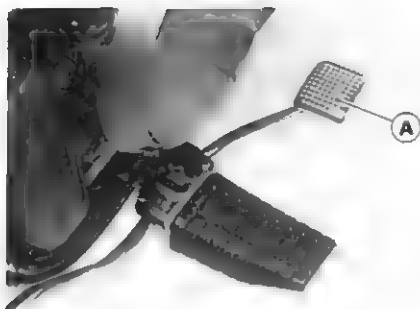
- Close the throttle completely, leaving the clutch engaged (except when shifting gears) so that the engine will help slow down the motorcycle.
- Shift down one gear at a time so that you are in 1st gear when you come to a complete stop.
- When stopping, always apply both brakes at the same time. Normally the front brake should be applied a little more than the rear. Shift down or fully disengage the clutch as necessary to keep the engine from stalling.
- Never lock the brakes, or it will cause the tires to skid. When turning a corner, it is better not to brake at all. Reduce your speed before you get into the corner.
- For emergency braking, disregard downshifting, and concentrate on applying the brakes as hard as possible without skidding.

### CAUTION

In order to protect the emission control parts, do not turn off the ignition switch when the motorcycle is in motion.



A. Front Brake Lever



**A. Rear Brake Pedal**

### **Stopping the Engine**

- Close the throttle completely.
- Shift the transmission into neutral.
- Turn the ignition switch off.
- Support the motorcycle on a firm level surface with the side stand.
- Lock the steering.

## **Stopping the Motorcycle in an Emergency**

Your Kawasaki Motorcycle has been designed and manufactured to provide you optimum safety and convenience. However, in order to fully benefit from Kawasaki's safety engineering and craftsmanship, it is essential that you, the owner and operator, properly maintain your motorcycle and become thoroughly familiar with its operation. Improper maintenance can create a dangerous situation known as throttle failure. Two of the most common causes of throttle failure are:

1. An improperly serviced or clogged air cleaner may allow dirt and dust to enter the carburetor and stick the throttle open.
2. During removal of the air cleaner, dirt is allowed to enter and jam the carburetor.

In an emergency situation such as throttle failure, your vehicle may be stopped by applying the brakes and disengaging the clutch. Once this stopping procedure is initiated, the engine stop switch may be used to stop the engine. If the engine stop switch is used, turn off the ignition switch after stopping the motorcycle.

## Parking

- Shift the transmission into neutral and turn the ignition switch off.
- Support the motorcycle on a firm level surface with the side stand.

### CAUTION

**Do not park on a soft or steeply inclined surface or the motorcycle may fall over.**

- If parking inside a garage or other structure, be sure it is well ventilated and the motorcycle is not close to any source of flame or sparks; this includes any appliance with a pilot light.

### ⚠ WARNING

**Gasoline is extremely flammable and can be explosive under certain conditions.**

- Lock the steering to help prevent theft.

## NOTE

- *When stopping near traffic at night, you can leave the taillight on for greater visibility by turning the ignition switch to the P (Park) position.*
- *Do not leave the switch at P position too long, or the battery will discharge.*





On rainy days, rely more on the throttle to control vehicle speed and less on the front and rear brakes. The throttle should also be used judiciously to avoid skidding the rear wheel from too rapid acceleration or deceleration.

Riding at the proper rate of speed and avoiding unnecessarily fast acceleration are important not only for safety and low fuel consumption but also for long vehicle life and quieter operation.

When riding in wet conditions or on loose roadway surfaces, the ability to maneuver will be reduced. All of your actions should be smooth under these conditions. Sudden acceleration, braking or turning may cause loss of control.

On rough roads, exercise caution, slow down, and grip the fuel tank with the knees for better stability.

When quick acceleration is necessary as in passing, shift to a lower gear to obtain the necessary power.

Do not downshift at too high an r/min (rpm) to avoid damage to the engine from overrevving.

Avoiding unnecessary weaving is important to the safety of both the rider and other motorists.

## Daily Safety Checks

Check the following items each day before you ride. The time required is minimal, and habitual performance of these checks will help ensure you a safe, reliable ride.

If any irregularities are found during these checks, refer to the Maintenance and Adjustment chapter or see your dealer for the action required to return the motorcycle to a safe operating condition.

### **⚠ WARNING**

**Failure to perform these checks every day before you ride may result in serious damage or a severe accident.**

Fuel ..... Adequate supply in tank, no leaks.

Engine oil ..... Oil level between level lines.

Tires..... Air pressure (when cold):

Front	225 kPa (2.25 kg/cm <sup>2</sup> , 33 psi)
Rear	250 kPa (2.5 kg/cm <sup>2</sup> , 36 psi)

Nuts, bolts, fasteners ..... Check that steering and suspension components, axles, and all controls are properly tightened or fastened.

Steering ..... Action smooth but not loose from lock to lock. No binding of control cables.

Brakes .....	Brake pad wear: Lining thickness more than 1 mm (0.04 in.) left. No brake fluid leakage. Brake pedal play 20 ~ 30 mm (0.8 ~ 1.2 in.). Brake lining wear: Indicator within "USABLE RANGE."
Throttle .....	Throttle grip play 2 ~ 3 mm (0.08 ~ 0.12 in.).
Clutch .....	Clutch lever play 2 ~ 3 mm (0.08 ~ 0.12 in.). Clutch lever operates smoothly.
Coolant .....	No coolant leakage. Coolant level between level lines (when engine is cold).
Radiator cap .....	Properly installed.
Final gear case .....	No oil leakage
Electrical equipment .....	All lights and horn work.
Engine stop switch .....	Stops engine.
Side stand .....	Returns to its fully up position by spring tension. Return spring not weak or not damaged.

Refer to the "Daily Safety Checks" caution label attached to the rear fender front under the seat.

## **Additional Considerations for High Speed Operation**

**Brakes:** The importance of the brakes, especially during high speed operation, cannot be overemphasized. Check to see that they are correctly adjusted and functioning properly.

**Steering:** Looseness in the steering can cause loss of control. Check to see that the handlebar turns freely but has no play.

**Tires:** High speed operation is hard on tires, and good tires are crucial for riding safety. Examine their overall condition, inflate to the proper pressure, and check the wheel balance.

**Fuel:** Have sufficient fuel for high consumption during high speed operation.

**Engine Oil:** To avoid seizure and resulting loss of control, make certain that the oil level is at the upper level line.

**Coolant:** To avoid overheating, check that the coolant level is at the upper level line.

**Final Gear Case Oil :** To avoid seizure and resulting loss of control, make certain the oil level is correct.

**Electrical Equipment:** Make certain that the headlight, tail/brake light, turn signals, horn, etc., all work properly.

**Miscellaneous:** Make certain that all nuts and bolts are tight and that all safety related parts are in good condition.

### **⚠ WARNING**

Handling characteristics of a motorcycle at high speeds may vary from those you are familiar with at legal highway speeds. Do not attempt high speed operation unless you have received sufficient training and have the required skills.

## »»»»»»»»»»»»»»»» MAINTENANCE AND ADJUSTMENT ««««««««««««««««

The maintenance and adjustments outlined in this chapter are easily carried out and must be done in accordance with the Periodic Maintenance Chart to keep the motorcycle in good running condition. **The initial maintenance is vitally important and must not be neglected.**

If you are in doubt as to any adjustment or vehicle operation, please ask your authorized Kawasaki dealer to check the motorcycle.

Please note that Kawasaki cannot assume any responsibility for damage resulting from incorrect maintenance or improper adjustment done by the owner.

## **EMISSION CONTROL INFORMATION**

To protect the environment in which we all live, Kawasaki has incorporated crankcase emission (1) and exhaust emission (2) control systems in compliance with applicable regulations of the United States Environmental Protection Agency and California Air Resources Board. Additionally, Kawasaki has incorporated an evaporative emission control system (3) in compliance with applicable regulations of the California Air Resources Board on vehicle sold in California only.

### **1. Crankcase Emission Control System**

This system eliminates the release of crankcase vapors into the atmosphere. Instead, the vapors are routed through an oil separator to the intake side of the engine. While the engine is operating, the vapors are drawn into the combustion chamber, where they are burned along with the fuel and air supplied by the carburetors.

### **2. Exhaust Emission Control System**

This system reduces the amount of pollutants discharged into the atmosphere by the exhaust of this motorcycle. The fuel and ignition systems of this motorcycle have been carefully designed and constructed to ensure an efficient engine with low exhaust pollutant levels.

### **3. Evaporative Emission Control System**

Vapors caused by fuel evaporation in the fuel system are not vented into the atmosphere. Instead, fuel vapors are routed into the running engine to be burned, or stored in a canister when the engine is stopped. Liquid fuel is caught by a vapor separator and returned to the fuel tank.

#### **High Altitude Performance Adjustment Information**

High altitude adjustment is not required for this motorcycle.

## **MAINTENANCE AND WARRANTY**

Proper maintenance is necessary to ensure that your motorcycle will continue to have low emission levels. This Owner's Manual contains those maintenance recommendations for your motorcycle. Those items identified by the Periodic Maintenance Chart are necessary to ensure compliance with the applicable standards.

As the owner of this motorcycle, you have the responsibility to make sure that the recommended maintenance is carried out according to the instructions in this Owner's Manual at your own expense.

The Kawasaki Limited Emission Control System Warranty requires that you return your motorcycle to an authorized Kawasaki dealer for remedy under warranty. Please read the warranty carefully, and keep it valid by complying with the owner's obligations it contains.



You should keep a maintenance record for your motorcycle. To assist you in keeping this record, we have provided space on pages 117 through 120 of this manual where an authorized Kawasaki dealer, or someone equally competent, can record the maintenance. You should also retain copies of maintenance work orders, bills, etc., as verification of this maintenance.

## **TAMPERING WITH NOISE CONTROL SYSTEM PROHIBITED:**

Federal law prohibits the following acts or the causing thereof: (1) the removal or rendering inoperative by any person other than for purposes of maintenance, repair, or replacement, of any device or element of design incorporated into any new vehicle for the purpose of noise control prior to its sale or delivery to the ultimate purchaser or while it is in use, or (2) the use of the vehicle after such device or element of design has been removed or rendered inoperative by any person.

Among those acts presumed to constitute tampering are the acts listed below:

- Replacement of the original exhaust system or muffler with a component not in compliance with Federal regulations.
- Removal of the muffler(s) or any internal portion of the muffler(s).
- Removal of the air box or air box cover.
- Modifications to the muffler(s) or air intake system by cutting, drilling, or other means if such modifications result in increased noise levels.

## Periodic Maintenance Chart

Frequency		*Odometer Reading km(mi)							
		800 (500)	5,000 (3,000)	10,000 (6,000)	15,000 (9,000)	20,000 (12,000)	25,000 (15,000)	30,000 (18,000)	See Page
Emission Related	Operation	Every	Whichever comes first						
	Carburetor synchronization -check †		●	●	●	●	●	●	82
	Idle speed-check †		●	●	●	●	●	●	82
	Throttle grip play-check †		●	●	●	●	●	●	79
	Spark plug-clean and gap †		●	●	●	●	●	●	71
	Valve clearance -check †		●	●	●	●	●	●	75
	Air suction valve-check †		●	●	●	●	●	●	75
	Air cleaner element-clean		●	●	●	●	●	●	76
	Air cleaner element-replace	5 cleanings				●			76
	Fuel system-check			●		●		●	101
Non-Emission	Evaporative emission control -system (c)-check		●	●	●	●	●	●	74
	Battery electrolyte level-check †	month	●	●	●	●	●	●	96
	Brake play-check †		●	●	●	●	●	●	89
	K Brake camshaft-lubricate	2 years				●			86

Frequency  Operation		Whichever comes first  ↓	*Odometer Reading km(mi)							
			800 (500)	5,000 (3,000)	10,000 (6,000)	15,000 (9,000)	20,000 (12,000)	25,000 (15,000)	30,000 (18,000)	See Page
Non-Emission Related	Brake light switch-check †	Every	●	●	●	●	●	●	●	91
	Brake lining and pad wear -check †		●	●	●	●	●	●	●	85
	Brake fluid level-check †	month	●	●	●	●	●	●	●	87
	K Brake fluid-change	2 years				●				88
	Clutch-adjust †		●	●	●	●	●	●	●	83
	K Steering-check †		●	●	●	●	●	●	●	—
	Final gear case oil level-check †				●		●		●	68
	Final gear case oil-change		●						●	69
	K Propeller shaft joint-lubricate				●				●	—
	Nut, bolt, and fastener tightness-check †		●		●		●		●	—
	K Spoke tightness and rim runout-check †		●	●	●	●	●	●	●	—
	Tire wear-check †			●	●	●	●	●	●	95
	Engine oil-change	year	●		●		●		●	62

Frequency Operation		Whichever comes first ↓	*Odometer Reading km(mi)							
			800 (500)	5,000 (3,000)	10,000 (6,000)	15,000 (9,000)	20,000 (12,000)	25,000 (15,000)	30,000 (18,000)	See Page
Non-Emission Related	Oil filter-replace	Every	●		●		●		●	62
	K General lubrication-perform			●	●	●	●	●	●	-
	K Front fork oil-change								●	-
	K Swingarm pivot-lubricate				●				●	-
	K Coolant-change	2 years							●	67
	Radiator hoses, connections -check †	year	●		●		●		●	64
	K Steering stem bearing-lubricate	2 years					●			-
	K Master cylinder cup and dust seal-replace	2 years								-
	K Caliper piston seal and dust seal-replace	2 years								-
	K Brake hose and pipe-replace	4 years								-
	K Fuel hose-replace	4 years								-

(C) California model only.

K : Should be serviced by an authorized Kawasaki dealer.

\* : For higher odometer readings, repeat at the frequency interval established here.

† : Replace, add, adjust, or torque if necessary.

## Engine Oil

In order for the engine, transmission, and clutch to function properly, maintain the engine oil at the proper level, and change the oil and oil filter in accordance with the Periodic Maintenance Chart. Not only do dirt and metal particles collect in the oil, but the oil itself loses its lubricative quality if used too long.

### **⚠ WARNING**

**Motorcycle operation with insufficient, deteriorated, or contaminated engine oil will cause accelerated wear and may result in engine or transmission seizure, accident, and injury.**

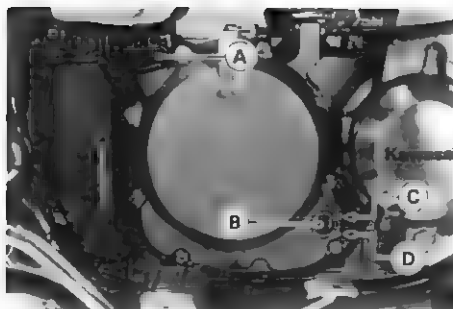
## *Oil Level Inspection*

- If the oil has just been changed, start the engine and run it for several minutes at idle speed. This fills the oil filter with oil. Stop the engine, then wait several minutes until the oil settles.

### **CAUTION**

**Racing the engine before the oil reaches every part can cause engine seizure.**

- If the motorcycle has just been used, wait several minutes for all the oil to drain down.
- Check the engine oil level through the oil level gauge. With the motorcycle held level, the oil level should come up between the lines next to the gauge.

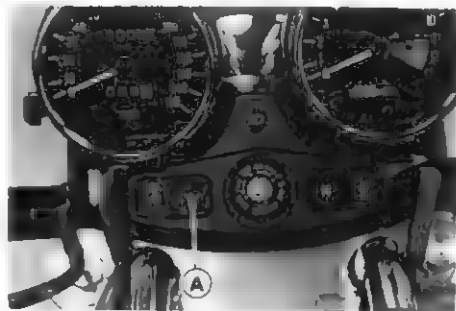


**A. Oil Filler Cap      C. Upper Level Line**  
**B. Oil Level Gauge      D. Lower Level Line**

- If the oil level is too high, remove the excess oil, using a syringe or other suitable device.
- If the oil level is too low, add the correct amount of oil through the oil filler opening. Use the same type and brand of oil that is already in the engine.

## CAUTION

If the engine oil gets extremely low or if the oil pump or oil passages clog up or otherwise do not function properly, the oil pressure warning light will light. If this light stays on when the engine speed is above 1,200 r/min (rpm), stop the engine immediately and find the cause.



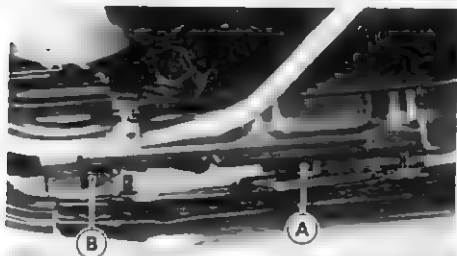
**A. Oil Pressure Warning Light**

### *Oil and/or Oil Filter Change*

- Warm up the engine thoroughly, and then stop the engine.
- Place an oil pan beneath the engine.
- Remove the engine drain plug.

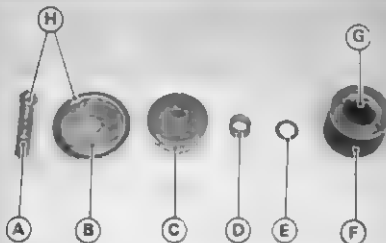
#### **⚠ WARNING**

Motor oil is a toxic substance. Dispose of used oil properly. Contact your local authorities for approved disposal methods or possible recycling.



A. Drain Plug  
B. Oil Filter Mounting Bolt

- With the motorcycle perpendicular to the ground, let the oil completely drain.
- If the oil filter is to be changed, remove the oil filter mounting bolt and drop out the oil filter.
- Replace the oil filter element with a new one.



A. Mounting Bolt  
B. Filter Cover  
C. Element Fence  
D. Spring  
E. Flat Washer  
F. Element  
G. Grommet  
H. O-Ring



## NOTE

- *Check for O-ring damage. If necessary, replace them with new ones.*
- *When installing the oil filter, make sure the O-rings are in place.*
- Apply a little engine oil to the O-ring on the filter mounting bolt, fit the filter cover and element fence on the bolt, and install the spring and flat washer.
- Apply a little engine oil to the grommets on both sides of the element, and turn the filter to work the element into place. Be careful that the element grommets do not slip out of place.
- Install the oil filter, tightening its mounting bolt to the specified torque.
- After the oil has completely drained out, install the engine drain plug with its gasket. Proper torque for it is shown in the table.

## NOTE

- *Replace the damaged gasket with a new one.*
- Fill the engine up to the upper level with a good quality motor oil specified in the table.
- Check the oil level.

### Tightening Torque

Engine Drain Plug:

20 N·m (2.0 kg·m, 14.5 ft-lb)

Oil Filter Mounting Bolt:

20 N·m (2.0 kg·m, 14.5 ft-lb)

### Engine Oil

Grade: SE, SF or SG class

Viscosity: SAE 10W40, 10W50,  
20W40, or 20W50

Capacity: 2.6 L (2.8 US qt)  
[when filter is not removed]  
3.0 L (3.2 US qt)  
[when filter is removed]

## Cooling System

### Radiator and Cooling Fan:

Check the radiator fins for obstruction by insects or mud. Clean off any obstructions with a stream of low-pressure water.

#### **⚠ WARNING**

The cooling fan turns on automatically, even with the ignition switch off. Keep your hands and clothing away from the fan blades at all times.

#### **CAUTION**

Using high-pressure water, as from a car wash facility, could damage the radiator fins and impair the radiator's effectiveness.

Do not obstruct or deflect airflow through the radiator by installing unauthorized accessories in front of the radiator or behind the cooling fan. Interference with the radiator airflow can lead to overheating and consequent engine damage.

### Radiator Hoses:

Check the radiator hoses for cracks or deterioration, and connections for looseness in accordance with the Periodic Maintenance Chart.

### **Coolant:**

Coolant absorbs excessive heat from the engine and transfers it to the air at the radiator. If the coolant level becomes low, the engine overheats and may suffer severe damage. Check the coolant level each day before riding the motorcycle, and replenish coolant if the level is low. Change the coolant in accordance with the Periodic Maintenance Chart.

### *Information for Coolant*

To protect the cooling system (consisting of the aluminum engine and radiator) from rust and corrosion, the use of corrosion and rust inhibitor chemicals in the coolant is essential. If coolant containing corrosion and rust inhibitor chemicals is not used, over a period of time, the cooling system accumulates rust and scale in the water jacket and radiator. This will clog up the coolant passages, and considerably reduce the efficiency of the cooling system.

### **⚠WARNING**

**Use coolant containing corrosion inhibitors made specifically for aluminum engines and radiators in accordance with the instructions of the manufacturer. Chemicals are harmful to the human body.**

Soft or distilled water must be used with the antifreeze (see below for antifreeze) in the cooling system.

### **CAUTION**

**If hard water is used in the system, it causes scale accumulation in the water passages, and considerably reduces the efficiency of the cooling system.**

If the lowest ambient temperature encountered falls below the freezing point of water, use permanent antifreeze in the coolant to protect the cooling system

against engine and radiator freeze-up, as well as from rust and corrosion.

Use a permanent type of antifreeze (soft water and ethylene glycol plus corrosion and rust inhibitor chemicals for aluminum engines and radiators) in the cooling system. On the mixture ratio of coolant, choose the suitable one referring to the relation between freezing point and strength directed on the container.

### CAUTION

**Permanent types of antifreeze on the market have anti-corrosion and anti-rust properties. When it is diluted excessively, it loses its anti-corrosion property. Dilute a permanent type of antifreeze in accordance with the instructions of the manufacturer.**

### NOTE

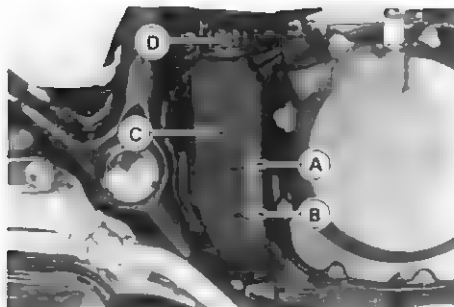
- *A permanent type of antifreeze is installed in the cooling system when shipped. It is colored green and contains ethylene glycol. It is mixed at 50% and has the freezing point of  $-35^{\circ}\text{C}$  ( $-31^{\circ}\text{F}$ ).*

### Coolant Level Inspection

- Situate the motorcycle so that it is perpendicular to the ground.
- Check the coolant level in the reserve tank. The coolant level should be between the FULL and LOW marks on the reserve tank cover.

### NOTE

- *Check the level when the engine is cold (room or atmospheric temperature).*



- A. FULL Mark
- B. LOW Mark
- C. Reserve Tank Cover
- D. Cap

- If the amount of coolant is insufficient, unscrew the cap from the reserve tank, and add coolant through the filler opening to the FULL mark.
- Install the cap.

## NOTE

○ In an emergency you can add water alone to the coolant reserve tank, however it must be returned to the correct mixture ratio by the addition of anti-freeze concentrate as soon as possible.

## CAUTION

If coolant must be added often, or the reserve tank completely runs dry, there is probably leakage in the system. Have the cooling system inspected by your authorized Kawasaki dealer.

### *Coolant Change*

Have the coolant changed by an authorized Kawasaki dealer.

## Final Gear Case Oil

In order for the pinion and ring gears in the final gear case to function properly, check the oil level, and change the oil in accordance with the Periodic Maintenance Chart.

### **⚠ WARNING**

**Motorcycle operation with insufficient, deteriorated, or contaminated oil causes accelerated wear and may result in seizure of the pinion and ring gears. Seizure can lock the rear wheel and skid the rear tire, with consequent loss of control.**

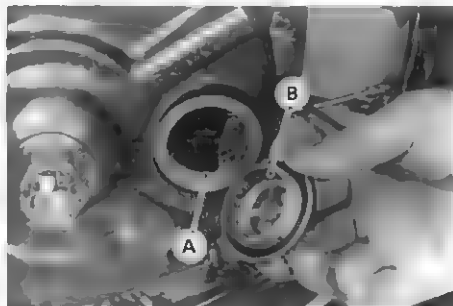
### *Oil Level Inspection*

- Have a helper hold the motorcycle vertical on level ground.
- Remove the filler cap.

### **CAUTION**

**Be careful not to allow any dirt or foreign materials to enter the gear case.**

- Check the oil level. If it is low, add oil as necessary. The oil level should come to the bottom thread of the filler opening with the motorcycle held vertical on level ground.



**A. Bottom Thread    B. Filler Cap**

## NOTE

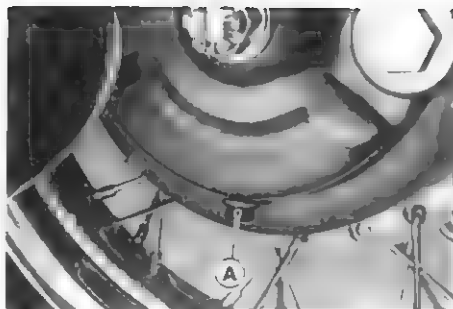
- *Use the same type and brand of oil that is already in the final gear case.*

## Oil Change

## NOTE

- *Final gear case oil drains easily and picks up any sediment when the oil is warmed up by running the motorcycle.*

- Put the motorcycle on its side stand.
- Place an oil pan beneath the gear case.
- Remove the filler cap and the drain plug.



A. Drain Plug

## ⚠ WARNING

When draining or filling the gear case, be careful that no oil gets on the tire or rim. Clean off any oil that inadvertently gets on them with soap and water. Gear case oil is a toxic substance. Dispose of used oil properly. Contact your local authorities for approved disposal methods or possible recycling.

- After the oil has completely drained out, install the drain plug and gasket. Replace the damaged gasket with a new one.
- With the motorcycle held vertical on level ground, fill the gear case up to the bottom thread of the filler opening with the oil specified below.

#### Final Gear Case Oil

Oil Capacity	about 190 mL (0.2 US qt)
Oil Type	API "GL-5" Hypoid gear oil above 5°C (41°F) SAE 90 below 5° (41°F) SAE 80

#### NOTE

- "GL-5" indicates a quality and additive rating. "GL-6" rated hypoid gear oils can also be used.
- Install the filler cap.



## Spark Plugs

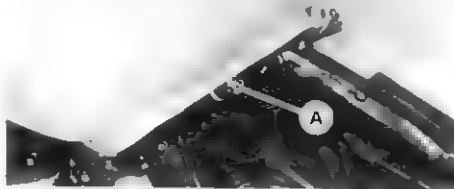
The standard spark plug is shown in the table. The spark plugs should be taken out periodically in accordance with the Periodic Maintenance Chart for cleaning, inspection, and resetting of the plug gap.

### Maintenance

If the plug is oily or has carbon built up on it, have it cleaned, preferably in a sand-blasting device, and then clean off any abrasive particles. The plug may also be cleaned using a high flash-point solvent and a wire brush or other suitable tool. Measure the gap with a wire-type thickness gauge, and adjust the gap if incorrect by bending the outer electrode. If the spark plug electrodes are corroded or damaged, or if the insulator is cracked, replace the plug. Use the standard plug.

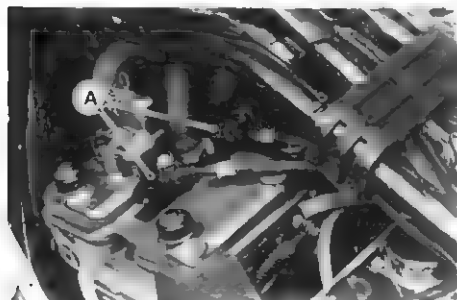
### Spark Plug Removal

- Remove the seat.
- Turn the fuel tap to the ON position to stop the fuel flow.
- Slide the hose clamp down, and disconnect the fuel hoses from the fuel tap.
- Remove the mounting bolt from the rear end of the fuel tank and remove the fuel tank.



A. Fuel Tank Mounting Bolt

- Carefully pull the spark plug caps off the spark plugs.



**A. Spark Plug Caps**

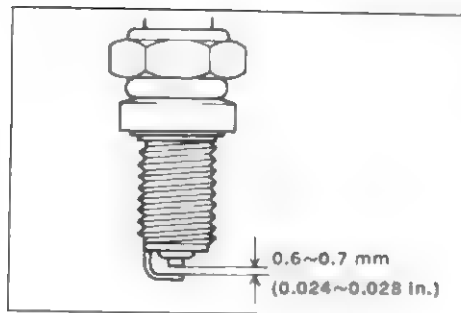
- Use the spark plug wrench in the tool kit when removing spark plugs.

## NOTE

- Spark plug installation is performed in the reverse order of removal.

### Spark Plug

Standard Plug	NGK DR9EA or ND X27ESR-U
Plug Gap	0.6 ~ 0.7 mm (0.024 ~ 0.028 in.)
Tightening Torque	14 N·m (1.4 kg·m, 10.0 ft·lb)



### Hotter Spark Plug

NGK DR8EA or  
ND X24ESR-U

### CAUTION

For cold weather and/or low speed riding, a hotter spark plug shown in the table may be used for quicker warm-ups and more efficient engine operation. However, for normal temperatures and/or high speed use, the standard spark plug must be used to prevent engine damage.

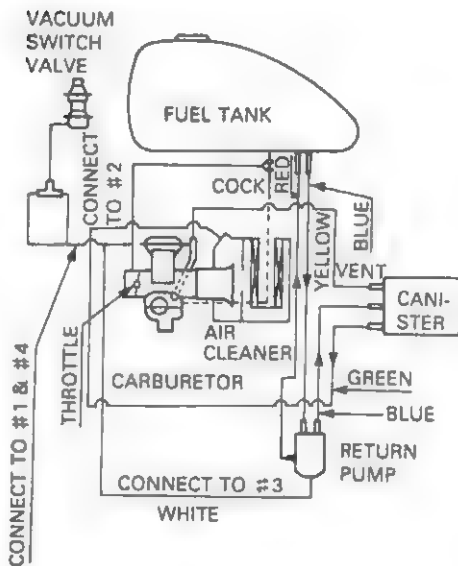
## Evaporative Emission Control System (California model only)

This system routes fuel vapors from the fuel system into the running engine or stores the vapors in a canister when the engine is stopped. Although no adjustments are required, a thorough visual inspection must be made at the intervals specified by the Periodic Maintenance Chart.

### Inspection

- Check that the hoses are securely connected.
- Replace any kinked, deteriorated, or damaged hoses.

## VACUUM HOSE ROUTING DIAGRAM



## Valve Clearance

Valve and valve seat wear decreases valve clearance, upsetting valve timing.

### CAUTION

**If valve clearance is left unadjusted, the wear will eventually cause the valves to remain partly open, which lowers performance, burns the valves and valve seats, and may cause serious engine damage.**

Valve clearance for each valve should be checked and adjusted in accordance with the Periodic Maintenance Chart.

Inspection and adjustment should be done only by a competent mechanic following the instructions in the Service Manual.

## Kawasaki Clean Air System

The Kawasaki Clean Air System (KCA) is a secondary air suction system that helps the exhaust gases to burn more completely. When the spent fuel charge is released into the exhaust system, it is still hot enough to burn. The KCA System allows extra air into the exhaust system so that the spent fuel charge can continue to burn. This continued burning action tends to burn up a great deal of the normally unburned gases, as well as changing a significant portion of the poisonous carbon monoxide into harmless carbon dioxide.

### Air Suction Valves:

The air suction valve is essentially a check valve which allows fresh air to flow only from the air cleaner into the exhaust port. Any air that has passed the air suction valve is prevented from returning. Inspect the air suction valves in accordance with the Periodic Maintenance Chart. Also, inspect the air suction valves whenever stable idling cannot

be obtained, engine power is greatly reduced, or there are abnormal engine noise.

Air suction valve removal and inspection should be done only by a competent mechanic following the instructions in the Service Manual.

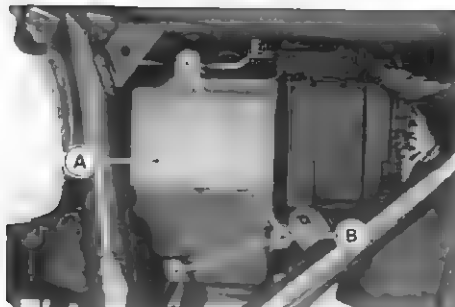
## **Air Cleaner**

A clogged air cleaner restricts the engine's air intake, increasing fuel consumption, reducing engine power, and causing spark plug fouling.

The air cleaner element must be cleaned and replaced in accordance with the Periodic Maintenance Chart. In dusty areas, the element should be cleaned more frequently than the recommended interval. After riding through rain or on muddy roads, the element should be cleaned immediately. The element should be replaced if it is damaged.

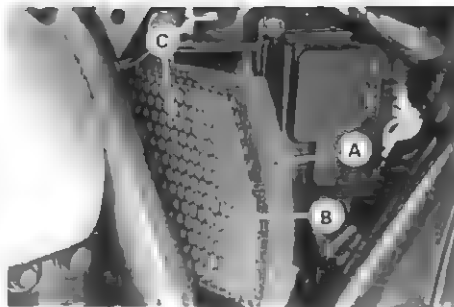
### *Element Removal*

- Remove the left side cover.
- Unscrew the air cleaner housing cap screws and remove the air cleaner housing cap.



**A. Air Cleaner Housing Cap**  
**B. Screws**

- Pull out the air cleaner element with metal frame.



**A. Element**  
**B. Metal Frame**  
**C. Wire Net**

- Remove the element from the metal frame.
- Push a clean, lint-free towel into the air cleaner housing to keep dirt or other foreign material from entering.
- Inspect the element material for damage. If any part of the element is damaged, the element must be replaced.

### **⚠ WARNING**

If dirt or dust is allowed to pass through into the carburetors, the throttle may become stuck, possibly causing accident.

### **CAUTION**

If dirt gets through into the engine, excessive engine wear and possibly engine damage will occur.

### **NOTE**

- *Element installation is performed in the reverse order of removal.*
- *Be sure to install the element with the wire net facing front.*

#### *Element Cleaning*

- Clean the element in a bath of a high flash-point solvent.
- Squeeze it dry in a clean towel.

- After cleaning, saturate the element with a high-quality foam air filter oil, squeeze out the excess oil, then wrap it in a clean rag and squeeze it as dry as possible. Be careful not to tear the element.

### **⚠ WARNING**

Clean the element in a well ventilated area, and take care that there are no sparks or flame anywhere near the working area; this includes any appliance with a pilot light. Do not use gasoline or a low flash-point solvent to clean the element. A fire or explosion could result.

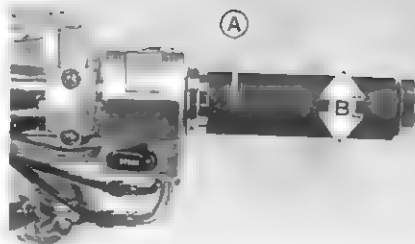


## Throttle Grip

The throttle grip controls the throttle valves. If the throttle grip has excessive play due to either cable stretch or maladjustment, it will cause a delay in throttle response, especially at low engine speed. Also, the throttle valves may not open fully at full throttle. On the other hand, if the throttle grip has no play, the throttle will be hard to control, and the idle speed will be erratic. Check the throttle grip play periodically in accordance with the Periodic Maintenance Chart, and adjust the play if necessary.

### *Inspection*

- Check that there is 2 ~ 3 mm (0.08 ~ 0.12 in.) throttle grip play when lightly turning the throttle grip back and forth.



**A. Throttle Grip**

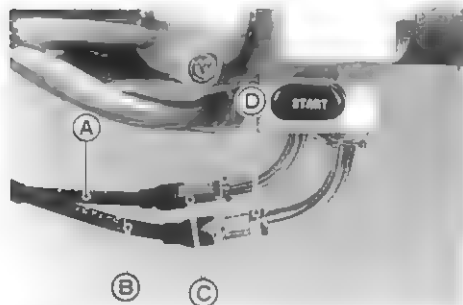
**B. 2 ~ 3 mm (0.08 ~ 0.12 in.)**

- If there is improper play, adjust it.

### *Adjustment*

- Loosen the locknuts, and screw both throttle cable adjusters in completely at the upper ends of the throttle cables so as to give the throttle grip plenty of play.

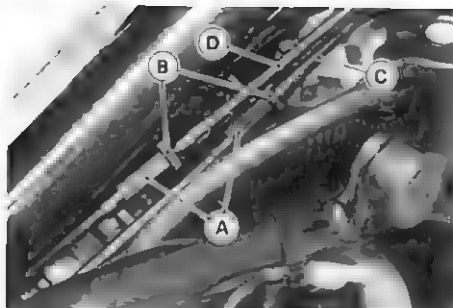
- Turn out the decelerator cable adjuster until there is no play when the throttle grip is completely closed. Tighten the locknut.



**A. Accelerator Cable**  
**B. Decelerator Cable**

**C. Adjusters**  
**D. Locknuts**

- Turn the accelerator cable adjuster until 2 ~ 3 mm (0.08 ~ 0.12 in.) of throttle grip play is obtained. Tighten the locknut.
- If the throttle cables cannot be adjusted by using the cable adjusters at the upper ends of the throttle cables, use the adjusters at the lower ends of the cables.
- Remove the fuel tank (Spark Plug Removal in Spark Plugs section).
- Loosen the locknuts, and screw both throttle cable adjusters in fully at the lower ends of the throttle cables so as to give the throttle grip plenty of play.



A. Adjusters

B. Locknuts

C. Decelerator Cable

D. Accelerator Cable

### **⚠ WARNING**

Operation with improperly adjusted, incorrectly routed, or damaged cables could result in an unsafe riding condition.

- With the throttle grip completely closed, turn out the decelerator cable adjuster until the inner cable just becomes tight.
- Tighten the locknut.
- Turn the accelerator cable adjuster until the correct throttle grip free play is obtained.
- Tighten the locknut.

## Carburetors

The carburetor adjustments, idle speed and synchronization, should be performed in accordance with the Periodic Maintenance Chart or whenever the idle speed is disturbed.

The following procedure covers the idle speed adjustment. Carburetor synchronization should be done only by a competent mechanic using vacuum gauges, following the instructions in the Service Manual.

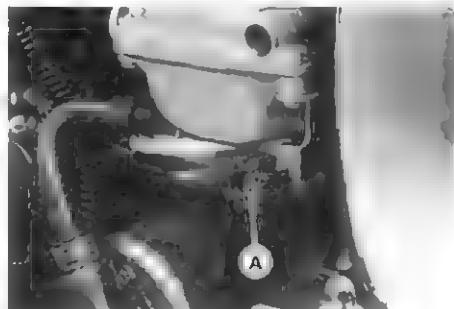
### NOTE

○ *Poor carburetor synchronization will cause unstable idling, sluggish throttle response, and reduced engine power and performance.*

#### Adjustment

- Start the engine, and warm it up thoroughly.

- Adjust the idle speed to 1,000 ~ 1,100 (California model: 1,200 ~ 1,300) r/min (rpm) by turning the idle adjusting screw.



A. Idle Adjusting Screw

- Open and close the throttle a few times to make sure that the idle speed does not change. Readjust if necessary.

- With the engine idling, turn the handlebar to each side. If handlebar movement changes the idle speed, the throttle cables may be improperly adjusted or incorrectly routed, or they may be damaged. Be sure to correct any of these conditions before riding.

**⚠ WARNING**

Operation with damaged cables could result in an unsafe riding condition.

## Clutch

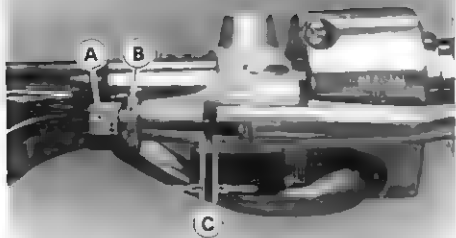
Due to friction plate wear and clutch cable stretch over a long period of use, the clutch must be adjusted in accordance with the Periodic Maintenance Chart.

**⚠ WARNING**

To avoid a serious burn, never touch a hot engine or exhaust pipe during clutch adjustment.

### *Inspection*

- Check that the clutch lever has 2 ~ 3 mm (0.08 ~ 0.12 in.) of play as shown in the figure.



- A. Adjuster  
B. Locknut  
C. 2 ~ 3 mm (0.08 ~ 0.12 in.)

If it does not, adjust the lever play as follows.

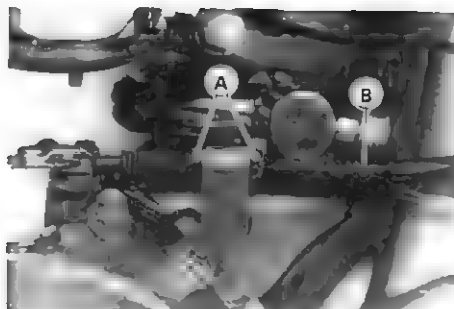
#### *Adjustment*

- Loosen the locknut at the clutch lever.
- Turn the adjuster so that the clutch lever will have 2 ~ 3 mm (0.08 ~ 0.12 in.) of play.

#### **⚠ WARNING**

Be sure the upper end of the clutch outer cable is fully seated in its fitting, or it could slip into place later, creating enough cable play to prevent clutch disengagement, resulting in a hazardous riding condition.

- Tighten the locknut.
- If it cannot be done, use the mounting nuts at the lower end of the cable.



A. Mounting Nuts    B. Clutch Cable

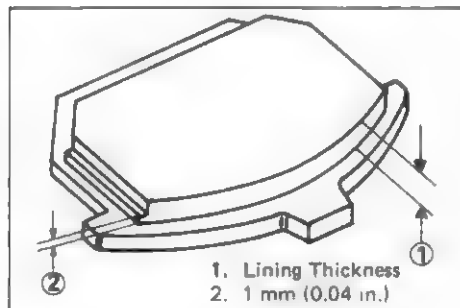
### NOTE

- After the adjustment is made, start the engine and check that the clutch does not slip and that it releases properly.

## Brakes

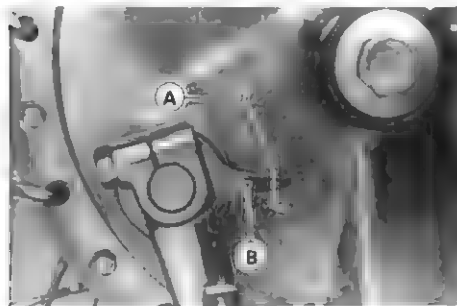
### Brake Wear Inspection

In accordance with the Periodic Maintenance Chart, inspect the brakes for wear. For the front disc brake caliper, if the thickness of either pad is less than 1 mm (0.04 in.), replace both pads in the caliper as a set. Pad replacement should be done by an authorized Kawasaki dealer.



On the rear brake panel is a brake lining wear indicator. If the brake lining

wear indicator does not point within the **USABLE RANGE** when the brake is fully applied, the brake shoe linings have worn past the service limit. In this case, the brake shoes must be replaced and the drum and other brake parts examined by an authorized Kawasaki dealer.



**A. USABLE RANGE**  
**B. Brake Lining Wear Indicator**

### *Lubrication*

In accordance with the **Periodic Maintenance Chart**, the brake camshaft should be lubricated by an authorized Kawasaki dealer.

### **Disc Brake Fluid:**

In accordance with the **Periodic Maintenance Chart**, inspect the brake fluid level in the reservoir and change the brake fluid. The brake fluid should also be changed if it becomes contaminated with dirt or water.

### *Fluid Requirement*

Recommended fluids are given in the table below. If none of the recommended brake fluids are available, use extra heavy-duty brake fluid only from a container marked **D.O.T.4**.



## Recommended Disc Brake Fluid

Castrol Girling-Universal  
Castrol GT (LMA)  
Castrol Disc Brake Fluid  
Check Shock Premium Heavy Duty

### CAUTION

**Do not spill brake fluid onto any painted surface.**

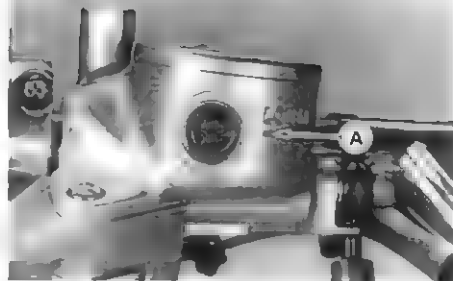
**Do not use fluid from a container that has been left open or that has been unsealed for a long time.**

**Check for fluid leakage around the fittings.**

**Check for brake hose damage.**

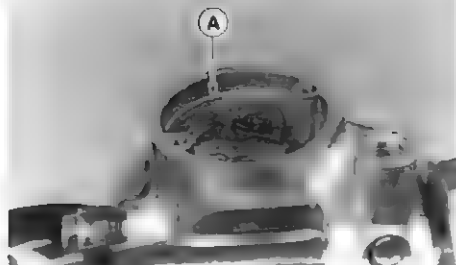
### *Fluid level Inspection*

- With the reservoir held horizontal, the brake fluid level in the front brake fluid reservoir must be kept above the line (lower level line) next to the gauge.



**A. Lower Level Line**

- If the fluid level in the reservoir is lower than the lower level line, check for fluid leaks in the brake lines, and fill the reservoir to the upper level line. Inside the front reservoir is a stepped line showing the upper level line.



A. Upper Level Line

**⚠WARNING**

Do not mix two brands of fluid. Change the brake fluid in the brake line completely if the brake fluid must be refilled but the type and brand of the brake fluid that is already in the reservoir are unidentified.

### *Fluid Change*

Have the brake fluid changed by an authorized Kawasaki dealer.

### **Front Brake:**

Disc and disc pad wear is automatically compensated for and has no effect on the brake lever action. So there are no parts that require adjustment on the front brakes.

**⚠WARNING**

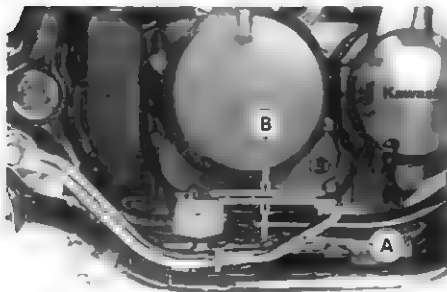
If the brake lever feels mushy when it is applied, there might be air in the brake lines or the brake may be defective. Since it is dangerous to operate the motorcycle under such conditions, have the brake checked immediately by an authorized Kawasaki dealer.

### **Rear Brake:**

Brake pedal position can be adjusted to suit you. In accordance with the Periodic Maintenance Chart, inspect the brake pedal play.

#### *Pedal Position Inspection*

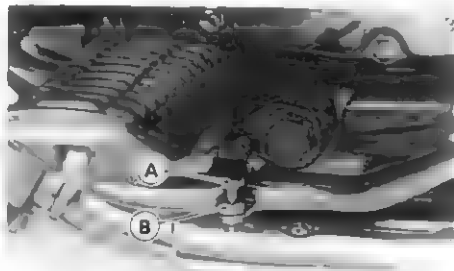
- When the brake pedal is in its rest position, it should be about 10 mm (0.4 in.) lower than the top of the footpeg.



**A. Brake Pedal**  
**B. About 10 mm (0.4 in.)**

#### *Pedal Position Adjustment*

- Loosen the locknut, and turn the adjusting bolt to adjust the pedal position.
- Tighten the locknut.

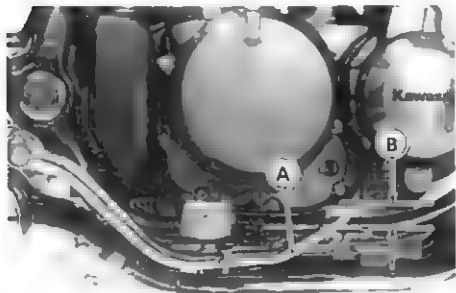


**A. Adjusting Bolt**    **B. Locknut**

- Check the brake pedal play and operation of the rear brake light switch.

### *Pedal Play Inspection*

- The brake pedal should have 20 ~ 30 mm (0.8 ~ 1.2 in.) of play when the pedal is pushed down lightly by hand.



**A. Brake Pedal**

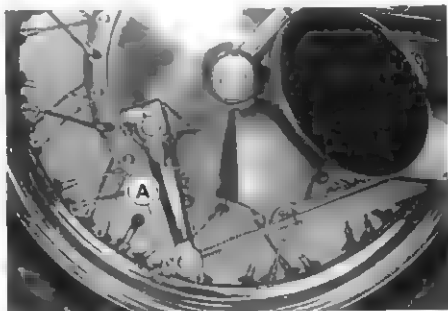
**B. 20 ~ 30 mm (0.8 ~ 1.2 in.)**

- Rotate the wheel to check for brake drag.
- Operate the pedal a few times to see that it returns to its rest position immediately upon release.
- Check braking effectiveness.

- If the pedal has improper play, adjust it.

### *Pedal Play Adjustment*

- Turn the adjusting nut at the brake cam lever so that the pedal has 20 ~ 30 mm (0.8 ~ 1.2 in.) of play.



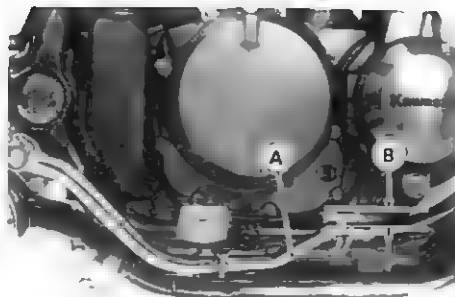
**A. Adjusting Nut**

## Brake Light Switches

When either the front or rear brake is applied, the brake light goes on. The front brake light switch requires no adjustment, but the rear brake light switch should be adjusted in accordance with the Periodic Maintenance Chart.

### *Inspection*

- Turn on the ignition switch.
- The brake light should go on when the front brake is applied.
- If it does not, ask your authorized Kawasaki dealer to inspect the front brake light switch.
- Check the operation of the rear brake light switch by depressing the brake pedal. The brake light should go on after about 15 mm (0.6 in.) of pedal travel.



A. Brake Pedal

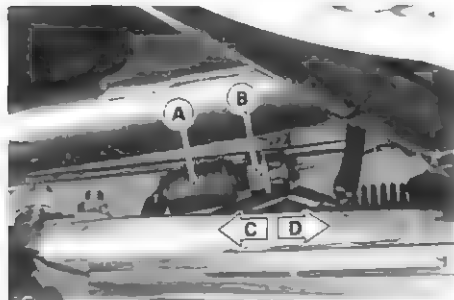
B. 15 mm (0.6 in.)

### *Adjustment*

- To adjust the rear brake light switch, move the switch forward or backward by turning the adjusting nut.

## CAUTION

To avoid damaging the electrical connections inside the switch, be sure that the switch body does not turn during adjustment.

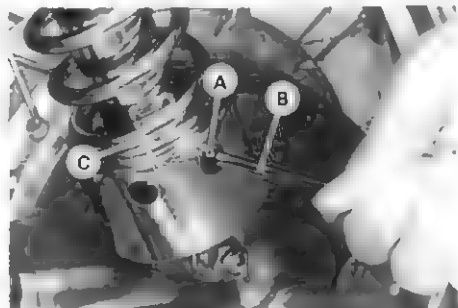


- A. Rear Brake Light Switch
- B. Adjusting Nut
- C. Lights sooner.
- D. Lights later.

## Rear Shock Absorbers

### *Spring Adjustment*

The spring adjusting sleeve on each rear shock absorber has 5 positions so that the spring can be adjusted for different road and loading conditions.



- A. Adjusting Sleeve
- B. Screwdriver Bit
- C. Setting Positions

If the spring action feels too soft or too stiff, turn each adjusting sleeve to be aligned with the desired positions on the

shock absorber by using the screwdriver bit in the tool kit in accordance with the following table.:

The standard setting position for an average-build rider of 68 kg (150 lb) with no passenger and no accessories is No.2.

Position	1	2	3	4	5
Spring Action	————→ Stronger				

**⚠ WARNING**

**If both spring adjusting sleeves are not adjusted equally, handling may be impaired and a hazardous condition may result.**

**NOTE**

*○ Be sure to turn back the adjusting sleeve counterclockwise from position 5 when softening the spring action*

## Wheels

### Tires:

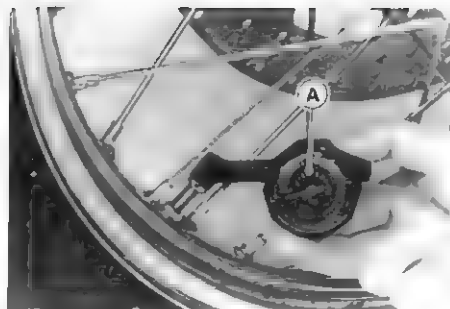
#### *Payload and Tire Pressure*

Failure to maintain proper inflation pressures or observe payload limits for your tires may adversely affect handling and performance of your motorcycle and can result in loss of control. The maximum recommended load in addition to vehicle weight is 183 kg (403 lb), including rider, passenger, baggage, and accessories.

- Check the tire pressure often, using an accurate gauge.

#### **NOTE**

- *Measure the tire pressure when the tires are cold (that is, when the motorcycle has not been ridden more than a mile during the past 3 hours).*
- *Tire pressure is affected by changes in ambient temperature and altitude, and so the tire pressure should be checked and adjusted when your riding involves wide variations in temperature or altitude.*



**A. Tire Pressure Gauge**

#### *Tire Air Pressure (when cold)*

Front	225 kPa (2.25 kg/cm <sup>2</sup> , 33 psi)
Rear	250 kPa (2.5 kg/cm <sup>2</sup> , 36 psi)

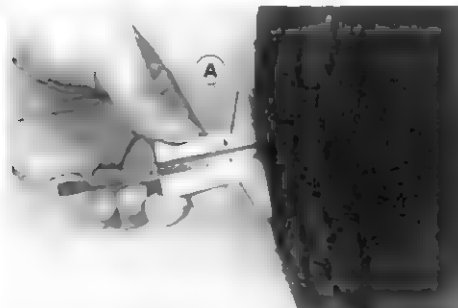
#### *Tire Wear, Damage*

As the tire tread wears down, the tire becomes more susceptible to puncture and failure. An accepted estimate is that 90% of all tire failures occur during the



last 10% of tread life (90% worn). So it is false economy and unsafe to use the tires until they are bald.

- In accordance with the Periodic Maintenance Chart, measure the depth of the tread with a depth gauge, and replace any tire that has worn down to the minimum allowable tread depth.



**A. Tire Depth Gauge**

#### Minimum Tread Depth

Front	1 mm (0.04 in.)
Rear	2 mm (0.08 in.)

- Visually inspect the tire for cracks and cuts, replacing the tire in case of bad damage. Swelling or high spots indicate internal damage, requiring tire replacement.
- Remove any imbedded stones or other foreign particles from the tread.

#### NOTE

- Have the wheel balance inspected whenever a new tire is installed.

#### ⚠ WARNING

To ensure safe handling and stability, use only the recommended standard tires for replacement, inflated to the standard pressure.

### Standard Tire (Tube-type)

Front	○ 100/90-18 56H DUNLOP F17, BRIDGESTONE Mag.MOPUS-L303 or METZELER Marathon Front TL
Rear	○ 150/80-15M/C 70H DUNLOP K255 or BRIDGESTONE EXEDRA G546 ○ 150/80B 15M/C 70V METZELER ME88 TL

### WARNING

Use the same manufacturer's tires on both front and rear wheels.

### Battery

#### *Battery Electrolyte Level Inspection*

The battery electrolyte level must be kept between the upper and lower level lines. Check the electrolyte level in each cell in accordance with the Periodic Maintenance Chart.

- Remove the battery from the motorcycle (see Battery Removal).
- Check that the electrolyte level in each cell is between the upper and lower level lines.



- A. Filler Caps**  
**B. Upper Level Line**  
**C. Lower Level Line**

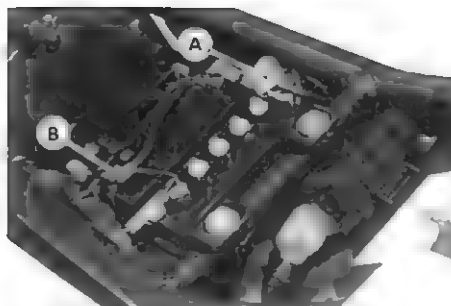
- If the electrolyte level is low in any cell, fill with distilled water as follows.
- Remove the battery filler caps and fill with distilled water until the electrolyte level in each cell reaches the upper level line.

### **CAUTION**

**Add only distilled water to the battery. Ordinary tap water is not a substitute for distilled water and will shorten the life of the battery.**

#### *Battery Removal*

- Remove the seat.
- Disconnect the leads from the battery, first from the (-) terminal and then the (+) terminal.



A. (+) Terminal      B. (-) Terminal

- Take the battery out of the case.
- Clean the battery using a solution of baking soda and water. Be sure that the lead connections are clean.

#### *Battery Installation*

- Put the battery in the battery case, and route the battery vent hose as shown on the caution label.

- Connect the capped lead to the (+) terminal, and then connect the black lead to the (-) terminal.
- Put a light coat of grease on the terminals to prevent corrosion.
- Cover the (+) terminal with its protective cap.
- Install the seat.

#### **CAUTION**

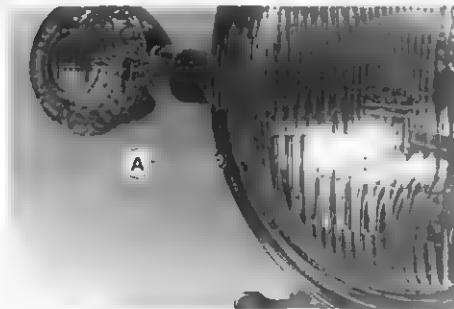
**Make sure the battery vent hose is kept away from the drive system and exhaust system. Battery electrolyte can corrode and dangerously weaken the drive system. Do not let the vent hose become folded, pinched, or melted by the exhaust system. An unvented battery will not keep a charge and it may crack from built-up gas pressure.**

## Headlight Beam

### *Horizontal Adjustment*

The headlight beam is adjustable horizontally. If not properly adjusted horizontally, the beam will point to one side rather than straight ahead.

- Turn the adjusting screw on the headlight rim in or out until the beam points straight ahead.

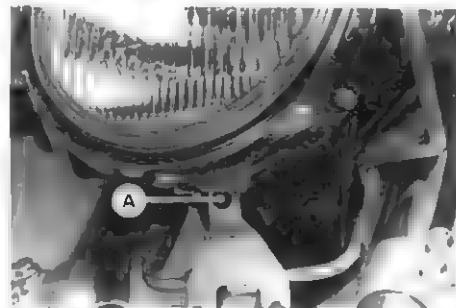


A. Adjusting Screw

### *Vertical Adjustment*

The headlight beam is adjustable vertically. If adjusted too low, neither low nor high beam will illuminate the road far enough ahead. If adjusted too high, the high beam will fail to illuminate the road close ahead, and the low beam will blind oncoming drivers.

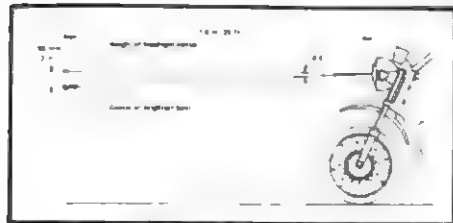
- Turn the adjusting screw on the lower portion of the headlight in or out to adjust the headlight vertically.



A. Adjusting Screw

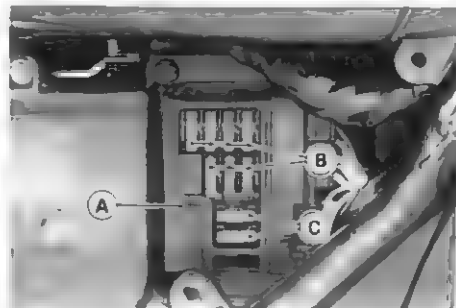
## NOTE

- On high beam, the brightest point should be slightly below horizontal. The proper angle is 0.4 degrees below horizontal. This is a 50 mm (2 in.) drop at 7.6 m (25 ft) measured from the center of the headlight, with the motorcycle on its wheels and the rider seated.



## Fuses

Fuses are arranged in the junction box next to the air cleaner housing located inside the left side cover. If a fuse fails during operation, inspect the electrical system to determine the cause, and then replace it with a new fuse of proper amperage.



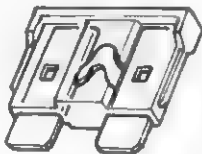
A. Junction Box  
B. Fuses

C. Spare Fuses

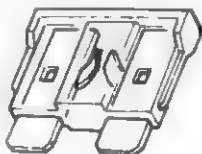
### **⚠ WARNING**

**Do not use any substitute for the standard fuse.**

**Replace the blown fuse with a new one of the correct capacity, as specified on the junction box.**



Normal



Failed

## **Fuel System**

Accumulation of moisture or sediment in the fuel system will restrict the flow of fuel and cause carburetor malfunction. The system should be checked in accordance with the Periodic Maintenance Chart.

### **⚠ WARNING**

**Gasoline is extremely flammable and can be explosive under certain conditions. Turn the ignition switch OFF. Do not smoke. Make sure the area is well ventilated and free from any source of flame or sparks; this includes any appliance with a pilot light.**

**Make sure the engine is cold before working. Wipe any fuel off the engine before starting it.**

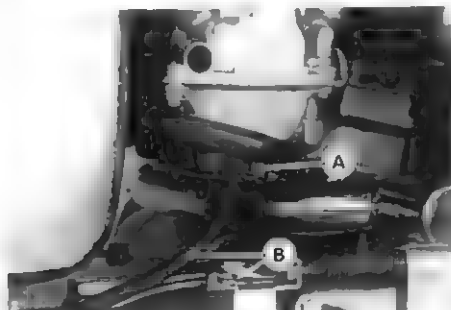
### *Inspection*

- Turn the fuel tap to the PRI position.

- Connect a suitable hose to the fitting at the bottom of each carburetor float bowl.
- Run the lower ends of the hoses into a suitable container.
- Turn out each drain screw a few turns to drain the carburetors, and check to see if water or dirt has accumulated in the carburetors.

## NOTE

- If any water or dirt appears during the above operation, have the fuel system checked by a competent mechanic following the procedure in the Service Manual.



A. Drain Screw

B. Suitable Hose

- Tighten the drain screws.



## General Lubrication

Lubricate the points shown below, with either motor oil or regular grease, in accordance with the Periodic Maintenance Chart or whenever the vehicle has been operated under wet or rainy conditions.

Before lubricating each part, clean off any rusty spots with rust remover and wipe off any grease, oil, dirt, or grime.

### NOTE

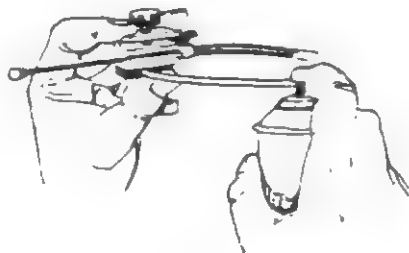
○ *A few drops of oil are effective to keep bolts and nuts from rusting and sticking. This makes removal easier. Badly rusted nuts, bolts, etc., should be replaced with new ones.*

## Apply motor oil to the following pivots:

- Side Stand
- Clutch Lever
- Front Brake Lever
- Rear Brake Pedal
- Rear Brake Rod Joint

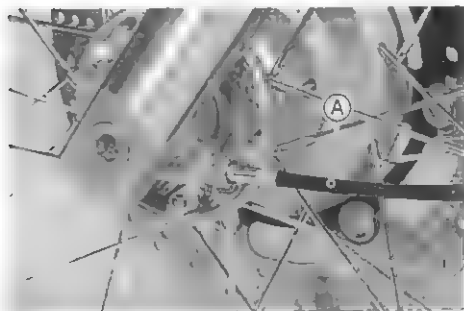
## Lubricate the following cables with a pressure cable luber:

- Clutch Inner Cable
- Throttle Inner Cables

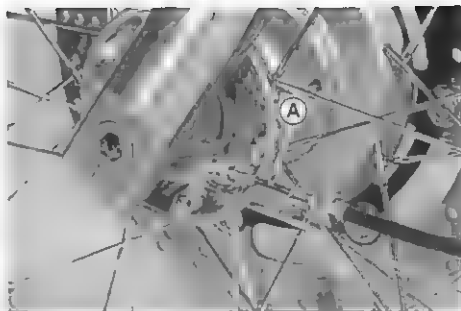


**Apply grease to the following points:**

- Clutch Inner Cable Upper End
- Throttle Inner Cable Upper Ends
- ○ Speedometer Inner Cable
- Grease the lower part of the inner cable sparingly.



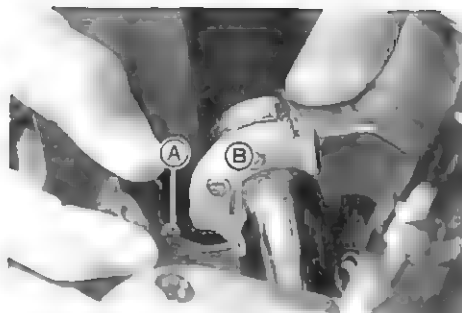
**A. Speedometer Cable**



**A. Grease**

**NOTE**

- *After connecting the cables, adjust them.*
- *Making sure that the projection in the switch housing fits into the hole in the handlebar, assemble the switch housing. And after installing the switch housing, check the throttle grip play and adjust it if necessary.*



A. Projection

B. Hole

### NOTE

- *Insert the speedometer inner cable into the speedometer gear housing while turning the wheel so that the slot in the end of the cable will seat in the tongue of the speedometer pinion.*

### Cleaning

For the prolonged life of your motorcycle, wash it down immediately after it has been splashed with seawater or exposed to the sea breeze; operated on rainy days, rough roads, or in dusty areas; or operated on roads on which salt has been scattered for ice removal.

### *Preparation for Washing*

Before washing, precautions must be taken to keep water off the following places:

- Rear opening of each muffler; Cover with plastic bags secured with rubber bands.
- Clutch and brake levers, switch housings on the handlebar; Cover with plastic bags.
- Ignition switch; Cover the keyhole with tape.
- Air cleaner intake; Close up the intake with tape, or stuff with rags.

### *Where to be Careful*

Avoid spraying water with any great force near the following places:

- Meter instruments
- Disc brake master cylinder and caliper
- Rear hub; If water gets inside the hub, the rear brake will not function until it dries out.
- Under the fuel tank; If water gets into the ignition coils or into the spark plug caps, the spark will jump through the water and be grounded out. When this happens, the motorcycle will not start and the affected parts must be wiped dry.
- Front wheel hubs
- Steering pivot (steering stem head pipe)
- Swingarm pivot

### **NOTE**

○ *Coin operated, high pressure spray washers are not recommended. The water may be forced into bearings and other components causing eventual failure from rust and corrosion. Some of the soaps which are highly alkaline leave a residue or cause spotting.*

### *After Washing*

- Remove the plastic bags and tape, and clean the air cleaner intake.
- Lubricate the pivots, bolts, and nuts.
- Test the brakes before motorcycle operation.
- Start the engine and run it for 5 minutes.

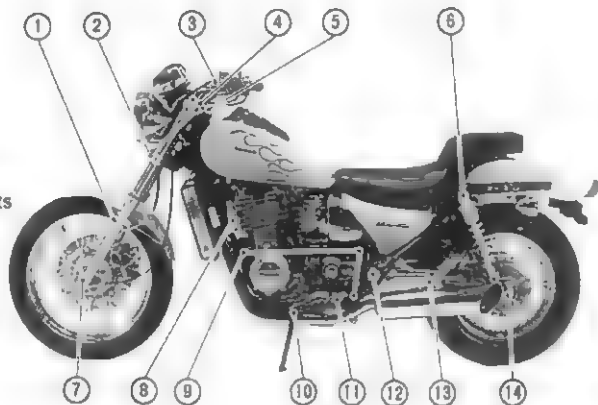
**⚠WARNING**

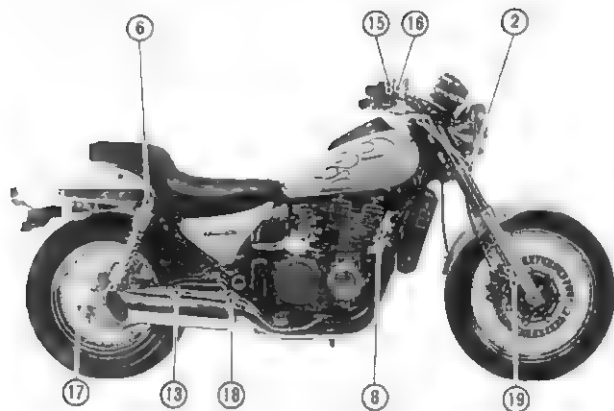
Never wax or lubricate the brake disc. Loss of braking and an accident could result. Clean the disc with an oilless solvent such as trichloroethylene or acetone. Observe the solvent manufacturer's warnings.

## Bolt and Nut Tightening

In accordance with the Periodic Maintenance Chart, it is very important to check the tightness of the bolts and nuts listed here. Also, check to see that each cotter pin is in place and in good condition. Please ask your authorized Kawasaki dealer for torque values.

1. Front Fender Mounting Bolts
2. Front Fork Clamp Bolts
3. Clutch Lever Holder Clamp Bolts
4. Handlebar Mounting Bolts
5. Stem Head Nut
6. Rear Shock Absorber Mounting Nuts
7. Front Axle Nut
8. Exhaust Pipe Mounting Nuts
9. Engine Mounting Bolts and Nuts
10. Side Stand Bolt
11. Shift Pedal Bolt
12. Pivot Shaft Nut
13. Muffler Mounting Bolt
14. Rear Axle Nut





- 15. Brake Master  
Cylinder Clamp Bolts
- 16. Brake Lever Holder  
Clamp Bolt
- 17. Brake Camshaft  
Mounting Bolt
- 18. Brake Pedal Bolt
- 19. Caliper Mounting Bolts





- Remove the empty fuel tank, pour about 250 mL (½ pint) of motor oil into the tank, roll the tank around to coat the inner surfaces thoroughly, and pour out the excess oil.
- Remove the spark plugs and spray fogging oil, such as Kawasaki K-Kare Fogging Oil (part number K61030-002), directly into each cylinder. Push the starter button for a few seconds to coat the cylinder walls. Install the spark plugs.

### **⚠ WARNING**

**Do not lean over the engine when performing this procedure. An air/oil mist may be forcibly ejected from the spark plug holes and could get into your eyes. If you do get some in your eyes, wash your eyes immediately with liberal amounts of clean, fresh water. Consult a physician as soon as possible.**

- Reduce tire pressure by about 20%.
- Set the motorcycle on a box or stand so that both wheels are raised off the ground. (If this cannot be done, put boards under the front and rear wheels to keep dampness away from the tire rubber.)
- Spray oil on all unpainted metal surfaces to prevent rusting. Avoid getting oil on rubber parts or in the brakes.
- Lubricate all the cables.
- Remove the battery, and store it where it will not be exposed to direct sunlight, moisture, or freezing temperatures. During storage it should be given a slow charge (one ampere or less) about once a month. Keep the battery well charged during cold weather so that the electrolyte does not freeze and crack open the battery. The more discharged the battery becomes, the more easily it freezes.

- Tie plastic bags over the exhaust pipes to prevent moisture from entering.
- Put a cover over the motorcycle to keep dust and dirt from collecting on it.

#### **Preparation after Storage:**

- Remove the plastic bags from the exhaust pipes.
- Check the electrolyte level in the battery, charge the battery if necessary, and install it in the motorcycle. Be careful that the battery vent hose is not pinched and that it is kept away from the driving system and other frame parts.
- Make sure the spark plugs are tight.
- Fill the fuel tank with fuel.
- Check all the points listed in the Daily Safety Checks section.
- Lubricate the points listed in the General Lubrication section.

## »»»»»»»»»»»»»»»» TROUBLESHOOTING GUIDE ««««««««««««««««

### **Engine Does Not Start:**

#### *Starter Motor Won't Turn*

- Engine stop switch off
- Clutch lever not pulled in and transmission not in neutral
- Fuse blown
- Battery leads do not make good electrical contact with battery terminals
- Battery discharged

#### *Engine Cranks, But Won't Start*

- No fuel in tank
- Fuel line clogged
- Fuel broken down
- Choke is not used when engine is cold
- Engine flooded
- Spark plugs not in good contact
- Spark plugs fouled or wet
- Incorrect spark plug gap
- Incorrect valve clearance
- Battery discharged

### **Engine Stalls:**

#### *Just When Shifting Into 1st Gear*

- Side stand has been left down
- Clutch does not properly disengage

#### *While Riding*

- Choke is used too long after moving off
- No fuel in tank
- Fuel tank air vent is obstructed
- Overheating
- Battery discharged



In order to provide a permanent record, all warranty and service resolutions take place only through written correspondence.

Please send your correspondence to:

CONSUMER RELATIONS  
KAWASAKI MOTORS CORP., U.S.A.  
P. O. Box 25252  
SANTA ANA, CA. 92799-5252  
(714) 460-5688

## **»»»»»»»»»»»»»»»»»»»»»»»» REPORTING SAFETY DEFECTS ««««««««««««««««««««««««**

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Kawasaki Motors Corporation, U.S.A.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or Kawasaki Motors Corporation, U.S.A.

To contact NHTSA, you may either call the Auto Safety Hotline toll-free at 1-800-424-9393 (or 366-0123 in Washington, D.C. area) or write to: NHTSA, U.S. Department of Transportation, Washington, D.C. 20590. You can also obtain other information about motor vehicle safety from the Hotline.

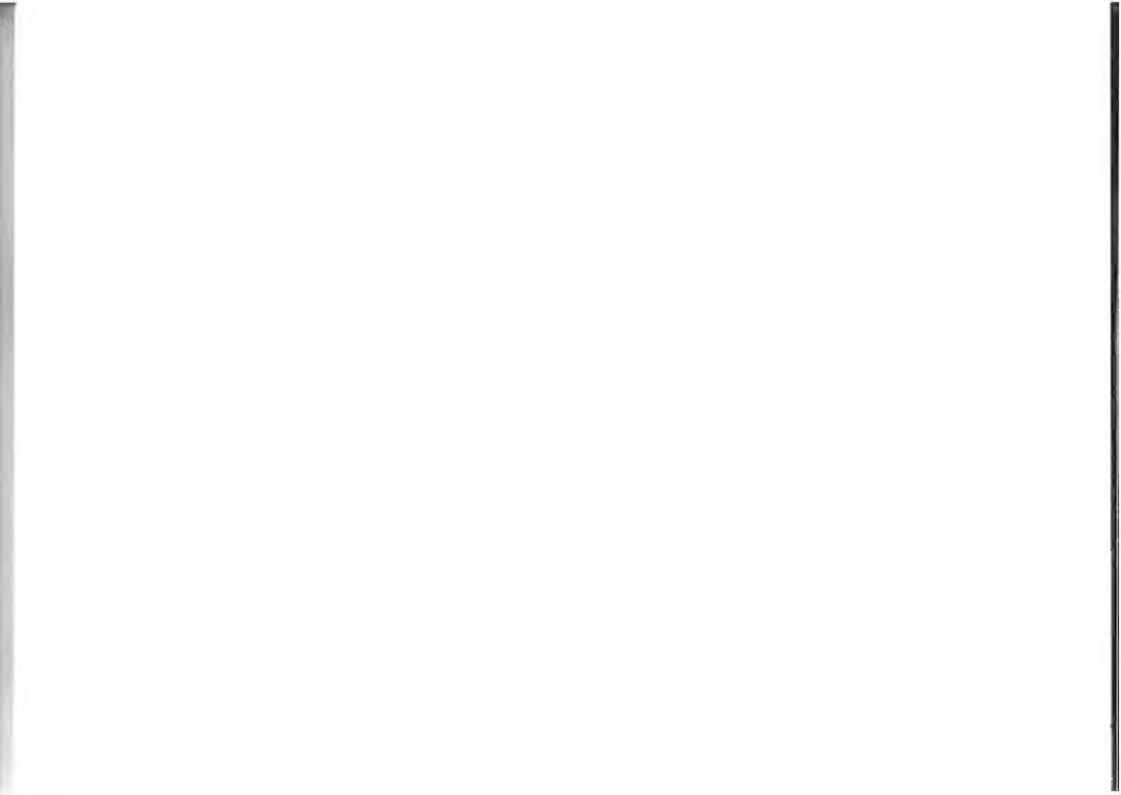


Date	Odometer Reading	Maintenance Performed	Dealer Name	Dealer Address





Date	Odometer Reading	Maintenance Performed	Dealer Name	Dealer Address



**ZL600-B3**



**KAWASAKI HEAVY INDUSTRIES, LTD.**  
Consumer Products Group

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